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08/477,711	06/07/1995	JOHN C. HARVEY	5634.312	6338

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EXAMINER

HARVEY, DAVID E

ART UNIT	PAPER NUMBER
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2614

DATE MAILED: 09/05/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

08/477,711

Applicant(s)

Harvey et al.

Examiner

David E. Harvey

Art Unit

2614

— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 3/19/02
- 2a) ☐ This action is FINAL.
- 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 2-11, and 13-39 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-11, and 13-39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirements.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

PTO 02-2842

CY=DE DATE=19870212 KIND=A1  
PN=3527939

METHOD FOR TRANSMITTING VIDEOTEXT AND PROGRAM  
IDENTIFICATION SIGNALS IN A TELEVISION SIGNAL  
[Verfahren zum Übertragen von Videotext- und  
Programmbeitragskennungssignalen  
in einem Fernsehsignal]

K.-U. Oberlies

UNITED STATES PATENT AND TRADEMARK OFFICE  
Washington, D.C. June 2002

Translated by: FLS, Inc.

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PRIORITY DATE	(32):	
INVENTOR	(72):	Oberlies, K.-U.
APPLICANT	(71):	Westdeutscher Rundfunk, Anstalt des öffentlichen Rechts
TITLE	(54):	METHOD FOR TRANSMITTING VIDEOTEXT AND PROGRAM IDENTIFICATION SIGNALS IN A TELEVISION SIGNAL
FOREIGN TITLE	[54A]:	Verfahren zum Übertragen von Videotext- und Programmbeitragskennungssignalen in einem Fernsehsignal

To display titles and possibly starting times of programs that are currently being received or that are receivable on the screen of a television receiver in plain text, it is proposed that the program index pages contained in the videotext signal be correlated with the program identification signals at the transmitter end so that the title of the program currently being transmitted is generated as a videotext special page and is inserted into the videotext signal and that, at the receiving end, at least the videotext special page allocated to the program currently being received is decoded and the information on the title of the program currently being transmitted, contained therein, is inserted into the television picture.

/0\*

#### Claims

/1

1. A process for transmitting videotext signals and program identification signals in a television signal, characterized in that the program index pages contained in the videotext signal is correlated with the program identification signals at the transmitter end so that the title of the program currently being transmitted is generated as a videotext special page and is inserted into the videotext signal and that, at the receiving end, at least the videotext special page allocated to the program currently being received is decoded and the information on the title of the program currently being transmitted, contained therein, is inserted into the television picture and/or shown on a special display.

2. A process as recited in Claim 1, characterized in that, in addition to the title of the program currently being transmitted,

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\*Number in the margin indicates pagination in the foreign text.

the title and the starting time of the following program is generated at the transmitter end and displayed at the receiver end.

3. A process as recited in Claim 1 or Claim 2, characterized in that, in addition to the title of the program currently being transmitted, its starting time is generated at the transmitter end and displayed at the receiver end.

4. A process as recited in one of Claims 1 through 3, characterized in that at the receiver end the videotext special pages allocated to additionally receivable programs are decoded and merged with the decoded videotext special page to form an overall view of the currently receivable programs and that the merged overall information is inserted into the television picture and/or shown on a special display.

5. Installation for reproduction, at the receiver end, of a television signal transmitted in accordance with Claims 1 through 4 of a first receiver device made of a tuner, IF stage, video modulator, sync separator, deflection stage, picture and sound stages, videotext decoder, picture tube, and control section ("television receiver with videotext decoder addition"), characterized by the following features:

- a) a second receiver device **220, 221** made of a tuner, IF stage, video demodulator, and receiver section **221**;
- b) a control and storage device **222, 223** in which all receivable channel numbers and the page numbers of the videotext special pages assigned to the channel numbers are

stored, from which the channel numbers are cyclically output to the tuner of the second receiver device 220, 221 and the videotext special page numbers to receiver section 221 of the videotext decoder of second receiver device 220, 221;

c) a control device 225 and a buffer storage device 224 which collect the information from receiver section 221 of the videotext decoder concerning the titles and possibly starting times of the programs which are sequentially received from the tuner of second receiver device 220, 221 to form an information overview and which, in accordance with a control command from control section 213, send the collected information overview to the reproduction section 205 of videotext decoder 203 of first receiver device 201.

6. A process as recited in Claim 1 and Claim 4, characterized in that the videotext index pages allocated to additionally receivable programs are decoded at the receiver end and are merged with the information contained therein concerning the title of the program currently being transmitted and, optionally, one or more additional programs to form an information overview on the programs currently receivable and that the merged information overview is inserted into the television picture and/or shown on a special display.

#### Specifications

The invention relates to a process in accordance with the preamble of Claim 1 and a device for implementation of this process

at the receiver end. A process of this type is known from previous Patent 34 24 812.

For easier programming of video recorders, it is known from *Rundfunktechnische Mitteilungen*, 1982, No. 6, pp. 254-257 to select the program information pages contained in the video text program and to select the desired program - the one to be programmed - for example by using a cursor. In this process, the starting and ending times, date of transmission, and program source of the selected program are set as the desired program identifier and they are sent to the program storage of the video recorder. The latter continually compares the current calendar date and the current time of day with the desired data of the program identification stored as indicated above and, if they are identical, it turns the video recorder to "record."

Since with this known process recordings can be incomplete or the incorrect program can be recorded if program times are changed or the program canceled, it is also known (NTZ, Vol. 35, No. 6, pp. 368-376) to transmit an actual program identifier as a data signal. The video recorder "watches" for the actual program identifier corresponding to the desired program identifier and turns the video recorder to "record" when the values are identical.

It has proven favorable to use a program's originally predicted starting time as actual program identifier, even for a program whose time has changed. The replacement program is distinguished from the changed program by an actual program



identifier that is one minute less than its actual starting time. According to a proposal in earlier patent 34 24 812, in addition to the actual starting times of the programs the videotext program information pages also contain the originally predicted starting time or the starting time minus 1 minute as desired program /2 identifier, either hidden or open. All known processes suffer from the fact that the titles of the currently received or receivable programs are not shown on the television screen or on a special display on the television, but must be taken indirectly from some program announcement medium, such as a program magazine or videotext.

It is the object of this invention to further refine a process of the type mentioned at the outset, so that at least the title of the program currently being received is displayed in plain text on the screen or on a special display of the television receiver either continuously or upon demand by the user.

This object is achieved in accordance with this invention by the characteristic features of Patent Claim 1.

Advantageous embodiments and refinements of the process as recited in Claim 1 may be found in dependent Claims 2 through 4.

A preferred device for reproduction at the receiver end of a television signal transmitted in accordance with this invention may be found in Claim 5.

The invention will be explained in greater detail with the help of the drawings. They show:

Figure 1: a block diagram of a device on the transmitter side for implementing the process in accordance with this invention;

Figure 2: a block diagram of a device on the receiver end for reproducing a television signal corresponding to the process of this invention;

Figure 3a: an example of a program index page, as transmitted in the videotext program;

Figure 3b: videotext special page provided for the first time using the process in accordance with this invention, showing the starting time and title of the program currently being transmitted and the starting time and title of the next program;

Figures 4a through 4c: examples of three videotext special pages from three different program sources; and

Figure 4d: information overview compiled in accordance with this invention in the reproduction device at the receiver end using the individually received videotext special pages.

In device 100 at the transmitter end, shown in Fig. 1 in block-diagram form and used to implement the process in accordance with this invention, the FBAS signal from studio 101, which contains the videotext signal "VT" and a program identification signal designated "VPS," is fed to the inputs of a videotext decoder 102 and a VPS decoder 103. Videotext decoder 102 is controlled by a videotext page number memory 104 so that those numbers of the videotext pages are selected that form a program index for the "television day" in question. The program indexes

exclusively decoded by videotext decoder 102 in this way are sent to a comparator 106. The desired program identifier for each program contained in the decoded program indexes is compared in comparator 106 with the actual program identifier, which is continuously supplied by VPS decoder 103. The videotext data resulting when the desired program identifier and the program identifier of the program actually being sent are found to be the same are temporarily stored in comparator 106 and sent as parallel data to parallel-serial converter 107. The serialized data in videotext format at the output of converter 107 are sent to a videotext combiner 108, which inserts these data in the form of a videotext special page into the videotext signal arriving over line 113 from the studio output. The videotext signal, supplemented with the videotext special page, is sent from videotext combiner 108 to a line keyer 109, which also has the signal from studio 101, including the videotext and VPS signal. The line keyer removes the videotext signal from the incoming television signal and adds the videotext signal from videotext combiner 108, which has been supplemented with the videotext special page. The resulting television signal with a "new" videotext signal and VPS signal is sent to transmitting antenna 114.

If no VPS signal is present in the signal at the studio output or if the data line of the television signal contains a status code indicating that studio 101 is sending no VPS signal, then a clock 105 is provided, which sends the current time of day to comparator

and memory 106. This time, rather than the VPS signal, is used for comparison with the desired program identification signal at the output of videotext decoder 102.

The television signal radiated from transmitting antenna 114 is received by the device 200 shown in Fig. 2. This device has a conventional television receiver 210, surrounded by the dotted line, with videotext decoder 203. The one tuner, an input stage of television receiver 210 having an IF stage and a video demodulator, is connected to receiving antenna 230. The FBAS output signal travels over line 202 to videotext decoder 203, which has a receiving section 204 and a reproduction section 205. In addition, the FBAS signal is sent to a PAL decoder, which produces an RGB signal from the FBAS signal. Finally, the sync signal is separated from the FBAS signal sent via line 212 to control device 225. The RGB signal at the output of the PAL decoder is sent via line 208 to a text inserter 207, as is the videotext signal, also present as an RGB signal, at the output of reproduction section 205 of videotext decoder 203. The control input 214 of the text inserter is connected to control section 213 of television receiver 210. Text inserter 207 switches between the RGB signal at the output of the PAL decoder, i.e. the normal picture signal, and the videotext signal at the output of reproduction section 205. The RGB signal that is switched through is sent from text inserter 207 to television receiver 210.

Moreover, control section 213 is also connected to the control

input of the tuner in color television receiver 210 and to control input 215 of videotext decoder 203 in order to place a television program or videotext on the picture tube screen, as the user chooses.

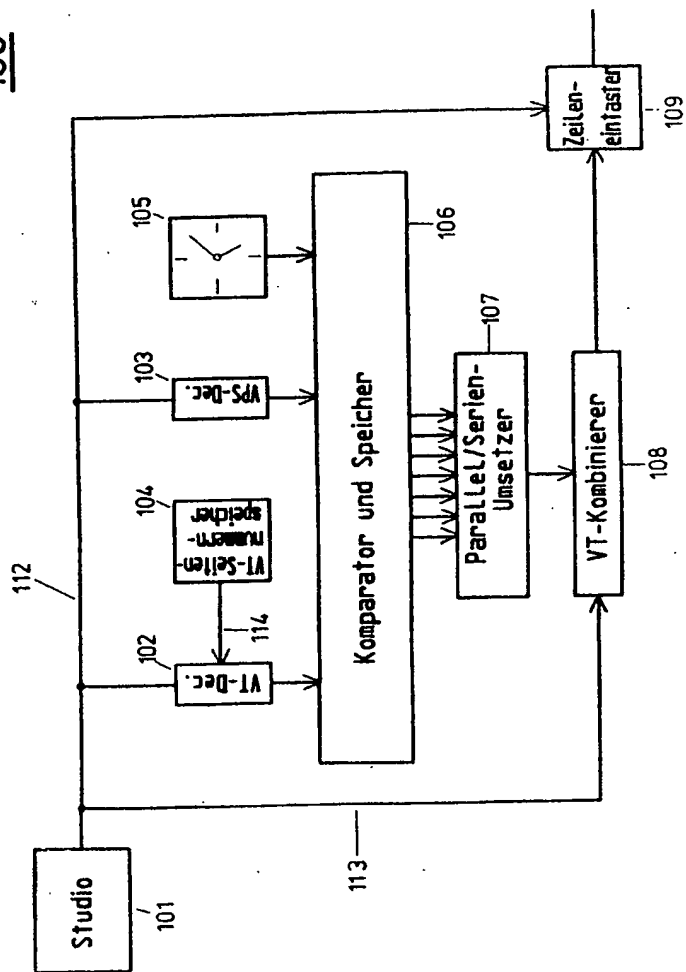
In addition to the components of television receiver 210 described above, device 200 also has a second receiver device 220, /3 consisting of a tuner, an IF stage, and a video demodulator, which is also connected to receiving antenna 230. The FBAS signal with videotext signal at output 226 of stage 220 is sent to an additional receiver section 221 of a video decoder which, like receiver device 220, is controlled by a storage device 222. Storage device 222 contains the channel numbers of the receivable program sources and page numbers of the videotext special pages as in Figure 3b belonging to each receivable program source. Storage device 222 is cyclically addressed by a sequencer 223, so that the stored channel numbers are cyclically read which, in turn, cyclically switch receiver device 220 to the receivable channels. With the stored page numbers of the videotext special pages, receiver section 221 of the videotext decoder decodes the videotext special pages allocated to each program source (channel), which is shown in Figures 4a through 4c for the case of three receivable videotext special pages. The videotext data of each decoded videotext special page are collected in a buffer storage device 224 and merged into an information overview, as in Figure 4d. The data input operation by buffer storage device 224 is controlled by

sequencer 223, whose output is connected to the address and write input 228 of buffer storage device 224. The output operation of buffer storage device 224 is performed by an output control device 225, which is synchronized by the S signal of television receiver 210 via line 212. The collected videotext data which is output by control device 225 are sent via line 229 to reproduction section 205 of videotext decoder 203 on the receiver side. Here they are further processed, like the videotext data from receiving section 204. Since operation of storage device 222 and, thus, of receiver section 221 and buffer storage device 224, is initialized by a control command from control section 213 to control input 217 of storage device 222, then if videotext data are sent via line 229 to reproduction section 205, no videotext data are present from receiving section 204, which is blocked by the control signal at control input 215 under the operating conditions in question. The videotext data sent from buffer storage device 224 as an information overview can be displayed on the screen along with the program signal from the program currently being received, whereby this mixed operation is initialized by a signal from reproduction section 205 over control line 218 to text inserter 207. Storage device 222 is also suitably programmed through input 217 by control section 213, which is preferred, although this can be accomplished in some other manner.

Using the process described above, it is possible for the first time to display in plain text on the screen of the television

receiver the title and possibly the starting time of the program currently being transmitted, as well as the following programs from each receivable program source. If desired, a separate display on the television receiver can also be used, which is directly controlled by the RGB output of reproduction section 205 of videotext decoder 203.

100



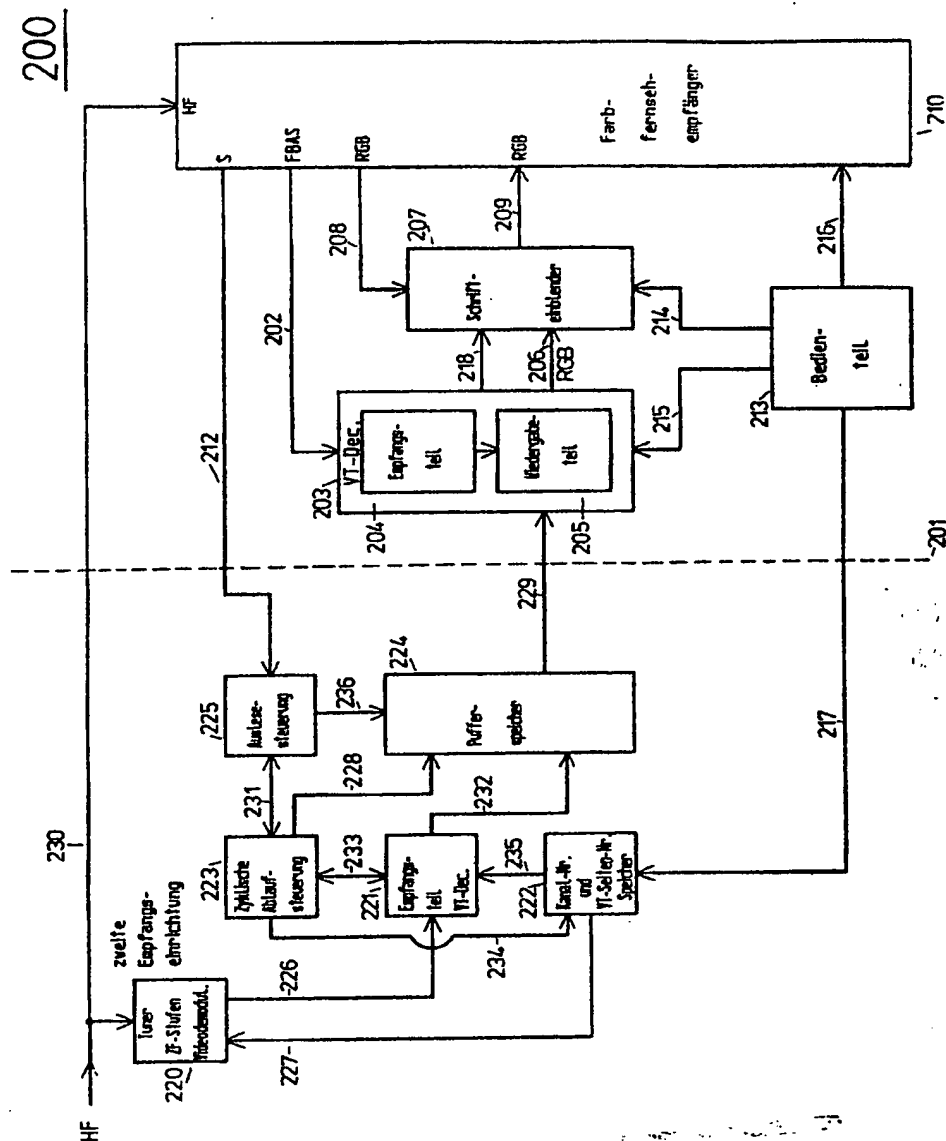
100

[Figure 1]

Key:

- 101) studio
- 102) videotext decoder
- 104) videotext page number memory
- 103) VPS decoder
- 105) clock
- 106) comparator and storage device
- 107) parallel-serial converter
- 108) videotext combiner
- 109) line keyer





[Figure 2]

Key:

- 220) tuner, IF stage, video demodulation; second receiver device
- 223) sequencer
- 225) control device
- 221) receiver section, VT decoder
- 224) buffer storage device
- 203) videotext decoder
- 204) receiving section
- 222) channel number and VT page number storage device

205) reproduction section  
207) text inserter  
210) color television receiver  
213) control section

[Figure 3a]

P160 160 ARD/ZDF Th 11.07.85 20:07:00		
[logo: ARD] THURSDAY		
11 July 1985		
THIS EVENING		
20:00	News . . . . .	222
20:15	Caprice	
	American film . . . . .	223
21:50	Plusminus . . . . .	224
22.30	Topics of the day . . . . .	225
23:00	2259 New: Parties Go to the Elections	
23:30	2300 Sports . . . . .	226
23:55	2325 This Evening	
	Guest: Elke Sommer . . . . .	227
00:40	0010 The Sweet Life . . . . .	228
01:40	0110 News until ca. 01:55	
	VPS	

[Figure 3b]

Current ARD Program		
since		
20:00	News . . . . .	222
at		
20:15	Caprice	
	American film . . . . .	223

[Figure 4a]

Current ARD Program		
since		
20:00	News . . . . .	222
at		
20:15	Caprice	
	American film . . . . .	223

[Figure 4b]

Current ZDF Program		
since		
19:30	A Clear Case	
at		
21:10	Today - Journal	
	Sports	
	10 minutes longer	

[Figure 4c]

Current WDF Program		
since		
20:00	News . . . . .	303
at		
20:15	Report from Abroad . . . . .	304

[Figure 4d]

Current ARD Program		
since		
20:00	News . . . . .	222
at		
20:15	Caprice	
	American film . . . . .	223
Current ZDF Program		
since		
19:30	A Clear Case	
at		
21:10	Today - Journal	
	Sports	
	10 minutes longer	
Current WDF Program		
since		
20:00	News . . . . .	303
at		
20:15	Report from Abroad . . . . .	.304

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## **SECTION I:**

During the present prosecution, many of the same issues have been raised in different ones of the many copending applications. In at least some cases, these issues appear to have been handled and addressed inconsistently between applications. Thus, the following "list" of positions taken by the examiner/Office in regard to such overlapping issues has been created, and will be maintained by the Office, in an attempt to ensure consistency in the way that these issues are handled between applications in the future.

### **THE EXAMPLES:**

1) In lines 2-8 on page 142 of the amendment filed on 1/28/2002 in application SN 08/470,571, applicant suggests that the examiner has objected to the fact that applicant provided citations showing dual 1981 and 1987 section 112 support for the limitations of the pending amended claims. No such objection has ever been raised by the examiner. To the contrary, the examiner found applicant's citations of dual support to be one of the most helpful aids that applicant has provided to date (i.e. when presented in the form of claim charts).

Having said this, the fact remains that examiner/Office was unquestionably misled by the many statements made by applicant concerning the "consequences" of Section 120 "priority". The reason that these statements misled the examiner/Office seems self evident from the statements themselves. For example, in the last 7 lines on page 24 of the Appeal Brief filed in SN 08/113,329 on 9/17/1996, applicant states:

***"The case law makes clear that the only inquiry concerning claims filed in a subsequent continuation application pursuant to Section 120 is whether they are adequately supported in under Section 112, first paragraph, in the initial application. If the support exists, the inquiry is at an end."***

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And statements made in the remarks section of many amendments in which applicant states:

***"The present application claims priority under 35 USC §120 of the following applications.....Consequently, Applicants will demonstrate disclosure only with respect to the '81 case,..."***

[e.g. see lines 9-21 on page 000507 of the Appendix in the document mailed on 9/10/01 in SN 08/474,139]

These statements misled the examiner/Office into believing that, as a consequence of Section 120, applicant was permitted to use the disclosure of his 1981 parent application alone, e.g. in place of the instant 1987 disclosure, to fulfill section 112 requirements when addressing/replying to Section 112 rejections. However, the examiner/Office now understands that, because applicant's past 1981 parent disclosure was not incorporated into the instant disclosure, the 1981 specification cannot be relied upon by applicant for showings of section 112 support when addressing/responding to rejections made under Section 112; i.e. all section 112 Support must come from the instant "1987" disclosure alone.

The "*objections*" made by the examiner in 08/470,571 were raised because the examiner perceived a continuation, on the part of the applicant, of the same arguments that misled the examiner/Office in the first place. By raising these "*objections*", the examiner hoped to elicit a response from applicant acknowledging the fact that the instant "1987" disclosure was the only disclosure which could be used to fulfill the requirements of section 112 with respect to the limitations of the currently pending amended claims (the significance of the 1981 disclosure is relegated only to the secondary issue of Section 120 priority). The examiner wanted to be sure that the examiner and applicant were now on the same page concerning this issue. And, on at least one occasion, such an acknowledgment appears to have been provided by applicant [see the last 5 lines on page 141 of the amendment filed on 1/28/2002 in SN 08/470,571].

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2) Applicant does not believe that “common subject matter” is required for “priority” under Section 120. Instead, according to applicant, the only thing that applicant needs to do in order to obtain the earlier 1981 filing date for his pending amended claims is to show that each of his pending amended claims can be given different 1987 and 1981 claim interpretations which allows each claim to be supported, in parallel, by “different subject matter” from the 1981 and 1987 specifications.

***“[Section] 120 does not require an applicant to demonstrate that the disclosures relied upon under §120 have anything in common besides their ability to separately comply with §112-1 with respect to the claims for which priority is sought. Accordingly, the Examiner’s focus on comparing the support from the two applications for similarity or common subject matter is improper and irrelevant because all applicants are required to do is satisfy §120 is show that each disclosure meets the requirements of §112-1 for a given claim.”*** (emphasis added)

[Page 141 of applicant’s response filed on 1/28/2002 in application S.N. 08/470,571]

***“Accordingly, the law requires a two part test in which the applicant separately demonstrates § 112 support for each application. In the FOA, the examiner distorts this straightforward test by imposing a third element of the test whereby the § 112 support from each application consists of ‘common subject matter.’”***

[see the last 10 lines on page 137 of the response filed on 1/28/2002 in SN 08/470,571].

Applicant’s position seems to be wrong.

***“However, as mentioned earlier, a continuing application is entitled to rely on the earlier filing date of an earlier application only with respect to subject matter common to both applications”*** (emphasis added)

[In *Transco Products, Inc., v. Performance Contracting, Inc.*, 32 USPQ2d 1077 [\*\*18]]

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***“Any claim in a continuation-in-part application that is directed solely to subject matter adequately disclosed under 35 U.S.C. 112 in the parent application is entitled to the filing date of the parent application.”***

[In *Transco Products, Inc., v. Performance Contracting, Inc.*, 32 USPQ2d 1077 (\*\*18)]

***“Assuming the common inventorship, copendency, and cross-reference required by section 120, that section further requires only that the invention be disclosed in the parent application in such manner as to comply with the first paragraph of section 112 and be the same invention as that disclosed in the later application.” (emphasis added)***  
[*Kirschner*, 305 F.2d 897 (C.C.PA1962)]

3) In the last 5 lines on page 141 of the response filed on 1/28/2002 in 08/470,571, applicant acknowledged that the 1981 application was not incorporated into the 1987 application. As a consequence, applicant also appears to understand that all Section 112 support must come solely from the “instant” 1987 disclosure if the requirements of section 112 are to be satisfied. If applicant knows such to be true, then it is not understood how applicant can then adopt the position that:

***“the [examiner’s] assumption that ‘all limitations of the currently pending claims are necessarily directed to that which is described in the present 1987 disclosure’ is mistaken and wholly unsupported.”***<sup>1</sup>

[lines 8-10 on page 144 of the amendment filed in 08/470,571 on 1/28/2002].

Namely, if all section 112-1 support for all of the claims’ limitations must

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<sup>1</sup> Contrary to applicant’s position, the examiner maintains that a pending claim must necessarily be directed to that which is described in the instant specification. This is not to say that the resulting scope of the pending claim is limited only to that which it must necessarily be directed.



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necessarily come from the instant "1987" disclosure alone (e.g. in light that the disclosure of the 1981 parent was not formally incorporated into the instant 1987 disclosure), then how can a limitation of a claim be directed to (i.e. and obtain required section 112-1 support from) anything but that which is described within the said instant 1987 disclosure? Is applicant suggesting that the pending amended claims are **not** necessarily directed to, do **not** necessarily derive section 112-1 support from, and are **not** necessarily claiming, subject matter that is found in the instant 1987 disclosure?

4) Applicant has alleged that "Teletext decoders" did not "locally generate" the images that they outputted/displayed. According to applicant, Teletext decoders only transferred, to their outputs, displayable image data that was received at their inputs. The examiner rejects such a notion. The following is noted:

a) That, as was exemplified via the discussion provided on page 5 of the appendix that was attached to a 1981 "PETITION FOR RULEMAKING" submitted to the FCC <sup>2</sup>, it was notoriously well known in the art that transmitted Teletext data *typically* comprised a "series of instructions" which instructed the Teletext decoders on how to "generate" the desired images which were to be outputted/displayed;

b) That conventional Teletext decoders *typically* comprised "character generators"; i.e. such "character generators" would not have been required had the received Teletext data actually comprised displayable image data as alleged by applicant; and

c) That transmitted Teletext data *typically* comprised of ASCII-type codes; i.e. wherein one of ordinary skill in the art would have understood the fact that these ASCII-type codes are not themselves displayable. Specifically, these ASCII-type codes only identified the

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<sup>2</sup> SEE: APPENDIX E and APPENDIX F of the latest Office action in SN 470,571.

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way in which locally stored pixel patterns which were locally retrieved and locally assembled into image frames, e.g. via the "character generators", in order to locally generate the images that were outputted/displayed.

Clearly, Teletext decoders operated to "*locally generate*" the images that they outputted and displayed! <sup>3</sup>

5) Applicant's 1987 inventions used a "SPAM" transmission packet structure to transmit ancillary information through the TV broadcast networks. By using the "SPAM" packet structure, a transmission scheme was established in which a piece of coherent "information", e.g. such as a complete "processor instruction", could be broken down into a plurality of "partial information" segments and communicated through the TV network within/as respective "discrete (packet) signals". On the receiver side of the 1987 inventions, the partial information from the plurality of discrete signals could be recovered and re-organized back into the original piece of coherent "information (e.g. re-organized back into the single complete processor instruction).

Applicant has alleged the above described "partial information" transmission scheme is a key feature which distinguishes applicant's alleged 1987 inventions over Teletext "prior art". Applicant's allegation is founded on a huge misunderstanding/misrepresentation of the Teletext "prior art". In fact, via such arguments, it appears that applicant is effectively trying to re-invent the foundation on which the Teletext "prior art"

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<sup>3</sup> Character data was "always" transmitted in an encoded non-displayable format by "typical" Teletext transmission systems; e.g. the only exception to this "typical" configuration that the examiner is aware of is "typical" Chinese/Japanese ideograph Teletext systems being that there were simply too many Chinese/Japanese characters to encode efficiently. Graphics data, on the other hand, was "typically" encoded such that designated bits of each transmitted graphic code could be mapped by the decoder to regions of the display screen so as to generate the graphics image frame that was to be displayed. Yet, even here, a local graphics generator was still required to convert the graphics codes into displayable pixel data. Such a local graphics generator was conventionally implemented either with dedicated logic circuitry or with a "graphics generator" of the "character generator" variety [SEE: the discussion under the headings "Producing the display" and "Graphics" on page 398 of the article "CEEFAX/ORACLE: reception techniques (part I)" by Money in the 7/1975 issue of "TELEVISION"; and lines 13-21 in column 9 of US Patent #3,982,065].

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was actually built [e.g. see the arguments which begin at the top of page 354 and extend to the bottom of page 356 in the response filed on 1/28/02 in SN 08/470,571].

Specifically, standardized Teletext was based on the recognition that vacant lines occurring during the VBI of TV signal transmissions could be used to transmit/communicate embedded frames/"pages" of character/graphics information along with the TV programming. However, it was instantly recognized that each video line did not have sufficient bandwidth to carry an entire frame/page of the character/graphics data. Therefor, the prior art Teletext systems established Teletext packet structures by which "partial image/information" segments (e.g. such as single "rows" of character and control information) could be communicated via respective discrete packetized signals which were embedded within respective discrete television line intervals. On the receiver side of the Teletext "prior art", the partial information segments from the plurality of discrete packetized signals were recovered and re-organized back into the original frame/pages of character/graphics information in order to "locally generate" a Teletext image for display. But the clear correlation that exists between applicant's "SPAM" transmission scheme and prior art Teletext transmission schemes does not end here!

In addition to the transmission of character/graphic frames/pages, those of ordinary skill in the art quickly recognized that the prior art Teletext transmission schemes could be "extended" so as to carry other kinds of information; e.g. "Telesoftware"(i.e. computer programming), remote control signaling, etc,...

This additional information was carried using the same packetized Teletext structure previously established for the character/graphic image data. For example, Telesoftware was also broken down into "partial information" segments to be carried as "rows" of character-like data within respective Teletext packets of one or more Teletext pages (e.g. depending on the size of the Telesoftware program that was being communicated). On the receiver side, the "partial information" segments of the additional information were then recovered from the transmitted discrete packet signals and were re-organized back into its original form (e.g. the complete "Telesoftware" program was reconstructed from the discrete partial programming segments).

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Given the above, it is still the examiner's position that applicant's 1987 packetized "SPAM" structure represents little more than applicant's own version of a conventional "extended" Teletext system [SEE part "A." under "Section XI" in the Office action mailed 8/27/01 in SN 08/470,571]. And again, for the reasons addressed above, the examiner continues to refute applicant's position that claim recitations directed to "discrete signals" and "partial information" contribute anything to avoiding applied Teletext "prior art"; i.e. applicant's allegations to the contrary represent nothing but "straw men."

6) Applicant points out that term "computer software/programming" has been defined as: "a series of instructions which controls the operation of a computer". Stretching this definition, applicant erroneously suggests that the term "computer software" encompasses: "any series of instructions which controls the operation of a computer". And finally, using this improperly stretched definition, applicant argues that each series of transmitted cuing-type codes which were described in his 1981 parent application *implicitly*<sup>4</sup> taught the transmission and/or downloading of "computer software" in view that each of these series of codes represented "instructions which controlled the operation of a computer". Applicant's argument is lame. For if one were to accept applicant's argument, then in applicant's new world:

a) a computer mouse and computer keyboard suddenly become generators of "computer software" because they too generate series of instructions which are used to control the operation of a computer;

b) Teletext data itself, when received by a CPU implemented decoder, suddenly becomes "computer software" because it too

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<sup>4</sup> Applicant is reminded that what might be "implied" by the 1981 disclosure is irrelevant to section 112-1 support issues. Section 112 support for a claimed feature is only provided if the claimed feature was actually disclosed; i.e. the feature must at least be "inherent" in the disclosure (not simply "implicit").

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represents series of instructions which are used to instruct a computer as to how to generate an image for display;

c) etc,...

Clearly, applicant's argument twists the definition of "computer software" in a way that is repugnant to its conventional use/meaning in order to obtain a 1981 effective filing date for something that he did not have in his possession, and/or did not disclose, until 1987; e.g. namely, the downloading of computer software.<sup>5</sup>

[note: parts "15)" and "16)" of this section too]

7) While applicant has alleged that his "computer software/programming" recitations should be stretched so as to retroactively find support from things which were not "computer software/programming"<sup>6</sup> (i.e. a series of cuing-type codes/signals from his 1981 disclosure), applicant also takes the opposite approach by alleging that circuit structures which operated to process signals (i.e. specifically Teletext decoders) are not encompassed by the "signal processor" recitations of his pending amended claims.<sup>7</sup> The examiner disagrees. The examiner points out that not only are Teletext decoders "signal processors" in any conventional sense of such terminology, but that Teletext decoders are in fact "signal processors" specifically within the context of applicant's own alleged invention. More to the point, the Teletext decoders of the applied prior art are like "SPAM" decoders of applicant's alleged inventions in that both decoders operated to extract and process packets of encoded information distributed to them, at least "*preferably*", via the VBI of broadcasted and/or cable casted TV

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<sup>5</sup> In the supplemental response filed 5/06/2002 in 08/470,571, applicant now submits a different version of essentially the same argument [see part "P)" in "SECTION I" of the latest Office action in 08/470,571].

<sup>6</sup> This erroneous *reading* has been used in order to erroneously allege a 1981 "priority" date for current claim recitations which are directed to the 1987 "computer software/programming" features of the instant 1987 CIP specification.

<sup>7</sup> This erroneous *reading* has been used to try to distinguish which is now claimed over applied "prior art" of record.

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programming; i.e. wherein the packets of encoded information comprised Teletext data packets in the case of prior art Teletext decoders and comprised SPAM data packets in the case of the SPAM decoders of applicants alleged invention.<sup>8</sup> Being such, applicant's allegation that conventional Teletext decoders should somehow be excluded by the "signal processor" recitations of his pending claims seems to fall under the heading of: "NONSENSE."<sup>9</sup>

8) The examiner maintains that applicant's own "SPAM" transmission system, at least as described in the context of television distribution, constitutes little more than applicant's own version of an "extended Teletext system"<sup>10</sup>. However, when Teletext "prior art" has been applied against applicant's claims, applicant has become hostile to the suggestion that there is any correlation between his "SPAM" transmission system and

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<sup>8</sup> In fact, for reasons which will be addressed in more detail below, the examiner maintains that the "SPAM" data packets of applicant's alleged invention represent, for all intents and purposes, little more than applicant's own version of a Teletext system in which the function of its Teletext data packets have been "extended" so as to carry more than just the normal displayable character/graphics code (e.g. "extended" to carry control signals, Telesoftware, etc,...).

<sup>9</sup> NOTE:

- 1) that *typical* Teletext decoders sequentially performed steps of signal slicing/separation, serial-to-parallel conversion, signal storage, ASCII code to pixel data translation, etc... all which were recognized as having comprised steps of "signal processing" [the last 16 lines on page 5 of the appendix that is attached to the "PETITION FOR RULEMAKING" which was filed with the FCC on 3/26/1981 by the "United Kingdom Teletext Industry Group" which explicitly indicates Teletext decoders as having performed "signal processing"]; and
- 2) that such processing was even true in the unusual "ideograph" decoders of applicant's argument [i.e. see the block labeled "Teletext signal processor" in figure 10 of the NHK article "A Teletext System for Ideographs" by Numaguchi et al. ].

<sup>10</sup> The term "extended Teletext" is being used here to refer to Teletext systems which have been "extended" so as to carry other types of information beyond the normal/typical coded Teletext character/graphic information. One alleged novel feature of applicant's SPAM packets was its ability to carry and distribute computer software. However, contrary to applicant's allegation, packets of "extended Teletext" systems had long been used to carry and distribute computer software too. In fact, the term "Telesoftware" had been specifically coined so as to refer to the "software" that was carried by "extended Teletext systems. The point being, that SPAM and Teletext data packets are equivalent right down to there recognized ability to carry other forms of information including "Telesoftware".

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conventional Teletext transmission systems.<sup>11</sup> Yet, on the other hand, applicant appears to openly believe that the scope of many of his pending amended claims encompasses the "WEATHER STAR" system/receiver technology which, to the extent understood by the examiner, is in fact a Teletext based technology.<sup>12</sup> If applicant's claimed/disclosed "SPAM" systems/receivers encompass Teletext based systems/receivers such as the "WEATHER STAR" system/receiver technology, then how in the world can applicant possibly suggest that "SPAM" and Teletext are not correlated/analogous technologies/arts with respect to the applied prior art? Clearly there is a conflict between the two positions.

9) Applicant and applicant's originally filed 1987 disclosure both seem to have alleged that "digital television signals/programming", of the type that is recited in many of applicant's pending amended claims, was notoriously well known in the art at the time of his alleged invention. The examiner has challenged applicant's apparent allegations and has requested that applicant submit "prior art" to show such to be true. In response to the examiner's requests, applicant has submitted U.S. Patent #3,906,480 to Schwartz et al. as having evidenced the conventional "digital television signal" technology on which his disclosure and amended claims were/are allegedly based [note the last 11 lines on page 97 and lines 3-6 on page 98 of the amendment filed on 6/7/2000 in SN 08/470,571]. The examiner continues to be mystified by this submission. The examiner points out that the cited Schwartz et al. patent describes a computer display system in which a computer was used to generate, albeit digitally, *frames* of vector encoded graphic/character information which were then transferred, via a data bus, to "digital TV monitors" for display thereon. As far as the examiner can tell, the Schwartz et al. disclosure has absolutely nothing to do with the transmission of "digitized TV signals/programming" in any conventional sense of such terminology. Simply trying to figure out how the

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<sup>11</sup> Yet a large portion, if not the majority, of the "prior art" cited by applicant pertains to Teletext.

<sup>12</sup> SEE: the article "Landmark forms cable weather news network" which was cited by applicant [see appendix VIII attached hereto]

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Schwartz et al. patent might be related to anything that was originally disclosed by applicant in his 1987 disclosure, much less trying to figure out how it could have been used to enable that which was originally disclosed by applicant in his 1987 disclosure, represents an insurmountable invitation to experimentation unto itself. If Schwartz et al. has been cited by applicant out of carelessness, then its submission to the Office for required review and consideration represents nothing less than an unnecessary drain on already limited PTO resources. If, on the other hand, Schwartz et al. was cited out of necessity (e.g. if it actually represents the best showing of his "digital television" recitation that applicant is/was aware of), then its very presence in the record only goes to support the examiner's position that which is now claimed by applicant, i.e. via the subsequently introduced "digital television" recitations, is not supported and/or enabled by applicant's originally filed 1987 disclosure.

10) Applicant has made many attempts to have the Zaboklicki reference [DE 2,914,981] removed from consideration. In many responses [e.g. the communication filed 7/13/2000 in 08/470,571], applicant has argued that the applied Zaboklicki reference should be removed from consideration simply because the teachings and descriptions provided by this applied prior art reference differ from teachings and descriptions provided by other non-applied members of its patent family (namely, GB #2,016,874). Such a position is absurd. If Zaboklicki DE 2,914,981 teaches that which applicant now claimed, then the fact that Zaboklicki GB #2,016,874 might not have provided these same teachings (even if true) is irrelevant to the fact that the claims ARE unpatentable over Zaboklicki DE 2,914,981. <sup>13</sup>

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<sup>13</sup> It is important to note that Zaboklicki [DE 2,914,981] included an extensive "List of References" section which described the operation of the Zaboklicki system element-by-element. This section was absent from Zaboklicki [GB 2,016,874]. This additional description in Zaboklicki [DE 2,914,981] is not trivial in that it goes a long way to understanding the invention which was disclosed in the *applied* Zaboklicki prior art; e.g. namely DE 2,914,981 (not GB 2,016,874).



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11) Within the originally filed abstract of applicant's 1981 past parent specification (i.e. note S.N. 06/317,510), the term "*programming*" was explicitly defined to mean:

***"everything transmitted over television or radio intended for communication of entertainment or to instruct or inform".***

[see lines 4-7 in the abstract of US patent #4,694,490]

Today this definition is in conflict with applicant's present needs (e.g. it too refutes applicant's claim to the earlier 1981 priority date <sup>14</sup>). Being such, applicant has argued that this explicitly stated definition should be ignored and given no weight because the "abstract", as applicant alleges, was not *technically* part of his 1981 written description. The examiner rejects this allegation too. The examiner points out: that the originally filed abstract was certainly part of the originally filed disclosure of applicant's 1981 parent application on which all issues must be considered/based and that the definition of "programming" that was provided by this originally filed abstract is completely consistent with the way that it was used throughout the 1981 disclosure.

12) Applicant seems willing to acknowledge that the "1987 inventions" that are described in the instant 1987 CIP specification are in at least in some ways *enhanced and improved* versions of the 1981 inventions that were described in applicant's past 1981 parent specification.

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<sup>14</sup> The examiner notes that applicant is only entitled to the 1981 priority date for "common subject matter", i.e. the "same" subject matter that is commonly found in both the present 1987 and the 1981 parent disclosures as originally filed. However, the term "programming" itself does not represent "common subject matter" required for priority because the definition given to it within the present 1987 disclosure is vastly different than the definition given to it via the 1981 parent. Specifically, whenever the "programming" terminology is used in a currently pending claim, section 112-1 demands that it be held to the definition that is explicitly provided via the present 1987 disclosure. This 1987 definition is not entitled to the 1981 priority date in view that the 1981 disclosure explicitly gave the same terminology a different meaning.

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***“In fact, both [the 1981 and 1987] specifications describe the inventions disclosed in the 1981 specification, although the 1987 specification contains many enhancements and improvements.”***

[see the last two lines on page 9 of applicant's supplemental response filed 5/6/02 in SN 08/470,571]

One of the “enhancements and improvements” that was effected via the subsequent filing of instant 1987 CIP specification was a change made to the definition of the word “programming.” Whereas the past 1981 Parent specification defined the terminology as referring to Television and Radio transmissions, the instant 1987 specification “improved and enhanced” the 1981 definition of “programming” to explicitly cover “all forms of electronic transmission” now explicitly including “computer programming”, “broadcast print”, etc,... (e.g. additions to the radio/TV transmission of the past 1981 definition).

***“everything that is transmitted over television or radio intended for communication of entertainment or to instruct or inform”;***

[“programming” as defined in the past 1981 Parent specification]

***“everything that is transmitted electronically to entertain, instruct, or inform including television, radio, broadcast print, computer programming, as well as combined medium programming”.***

[“programming” as defined in the instant 1987 CIP specification]

Thus, whereas a potential infringer might have reasonably argued that any claim which derives its required section 112-1 support from the past 1981 specification cannot be fairly read on subject matter outside the Television and Radio transmission arts given the 1981 definition of “programming” (e.g. that these claims cannot be fairly read on computer software/programming transmissions), the wiggle room for such arguments has been effectively eliminated when the identically worded claims derive their required section 112-1 support from the instant 1987 CIP specification

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instead; i.e. being that the 1987 specification replaces the 1981 definition of “programming” with the new “improved and enhanced” 1987 definition of “programming” which has been expanded to explicitly covers “all forms of electronic transmission” including, i.e. explicitly, said “computer programming” transmissions.<sup>15</sup> Thus, the examiner asks:

**Why should any applicant be allowed to improve/enhance/redefine the subject matter that is being recited by a given claim using the new subject matter that was added via a subsequently filed CIP specification, e.g. in order to tighten the noose on existing potential infringers and/or to cast a wider net to ensnare new potential infringers, and yet still be entitled to the earlier filing date of a past un-incorporated 1981 Parent specification that did not contain this improved/enhanced/redefined subject matter?**  
*(The short answer to this question is: NOT!)*

The point being that applicant had every right to draft a claim based on his past 1981 parent specification which contained the 1981 definition of “programming”, and to have taken the position that a fair reading of the 1981 “programming” terminology, e.g. in the context of said past 1981 parent specification, encompassed “computer programming” transmission too; i.e. wherein such an “argument” would have been necessary in view that the 1981 definition of “programming” did not include “computer programming”. Instead, applicant elected to draft a new CIP specification

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<sup>15</sup> The examiner maintains that the differences in the respective 1981 and 1987 definitions of “programming”:

1) represent real differences in the respective “properties” of the different kinds of “signaling” that made up the respective 1987 and 1981 subject matter, and

2) are not simply different statements of “disclosed utilities” as applicant might try to allege in the future.

(e.g. once again, the 1987 SPAM-type signaling subject matter that is necessarily being claimed by the pending claims is explicitly inclusive of “computer software/programming” whereas the 1981 signaling subject matter was not).

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which modified the definition of “programming” to explicitly include “computer programming” thereby eliminating any question that the fair reading of “programming”, in the context of the new 1987 CIP, now encompasses “computer programming”. Again, the examiner asks:

**Why should any applicant be allowed to improve/enhance/redefine the subject matter that is being recited by a given claim using new subject matter that was added via a subsequently filed CIP specification, e.g. in order to tighten the noose on existing potential infringers and/or to cast a wider net to ensnare new potential infringers, and still be entitled to the earlier filing date of a past un-incorporated 1981 Parent specification that did not contain this improved/enhanced/redefined subject matter?**

*(E.G. Why does applicant believe that his new 1987 definition of “programming” should be entitled to the 1981 filing date of the old 1981 “programming” definition which it replaced?; Why should applicant’s “1987 inventions”, which have been re-defined by the new 1987 definition of “programming”, be entitled to the 1981 filing date of “past 1981 inventions” which were defined by the past 1981 definition of “programming?”; etc,...)*

**13)** In order to try to overcome applied prior art of record, applicant has willfully and repeatedly alleged that the Radio and Television broadcast arts represent non-analogous arts. This position is absurd and wholly unsupportable too. The examiner points out that the Television broadcast art actually evolved from the radio broadcast art because the original radio broadcast networks represented existing entities who had the program distribution resources and expertise that was easily extended and applied to TV programming; e.g. NBC, CBS, ABC all began as Radio distribution networks which evolved, quite “naturally”, into Television broadcast networks too [NOTE: the last 5 lines of the first paragraph of the first column on page 811 of the article “Versatile Transmission Video Facilities at NBC New York” by Mausler which states that: “the origins of television

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broadcasting practice may be found in radio" (a copy of which was provided within SN 08/470,571)]. In fact, the most significant difference (i.e. if not the only "real" difference) between Radio and Television distribution networks is the difference in bandwidth of the equipment that is required to handle Radio and Television program distributions. Thus, for example, when Hetrich [Australian #74,619] stated that his disclosed "Netcue" system was applicable to either "a network of radio or television stations", one of ordinary skill in the art would have recognized that this teaching was in fact founded on the underlying understanding that Radio and Television network were in fact analogous arts. Applicant's allegations to the contrary is based on a unrealistically low level of skill in the art.

**14)** Throughout the prosecution of their patent portfolio, applicant has alleged that the "*simultaneous or sequential presentation*" recitation, as found in many of their pending claims, represents a "key limitation" in overcoming and/or avoiding "prior art" of record [note: lines 2-6 on page 17 of Appendix A in the response filed on 3/19/2001 in SN 08/469,078; and part "4)" under "Section VII" of the Office action mailed 8/27/01 in SN 08/470,571]. The examiner strongly disagrees. Specifically, the examiner points out that the alternative expressions "*simultaneous or sequential*" or "*one of a simultaneous and sequential*" simply encompasses ANY AND ALL of the ways by which two types of information could ever be presented to a given audience. Specifically, any time two types of information are presented to a given audience, they must necessarily be presented to that audience either *simultaneously or sequentially* in time. The phrase "*simultaneous or sequential*" simply covers ALL of the possibilities! Thus, if one can show that a given piece of "prior art" operated to present two types of information to a given audience, then one has in fact inherently shown that the prior art meets the "*simultaneous or sequential presentation*" limitation of applicant's claims; i.e. again, the recitation "*simultaneous or sequential*" simply covers ALL of the way that two types of data could ever be displayed to a single audience!

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**15) Applicant has alleged that his past 1981 Parent specification “implicitly” taught the downloading of “computer programming” (i.e. computer software).<sup>16</sup>**

***“To the contrary, the 1981 definition [of “programming”] implicitly includes, and the 1987 definition [of “programming”] explicitly includes, computer programming in the definition”.***

In an attempt to create support for this erroneous allegation, applicant tries to weave together a tapestry of “engineered” teachings and definitions:

A) Applicant falsely asserts that the past 1981 Parent specification literally used the term “programming” to refer to the “instruction signals” that were communicated through the TV/RADIO networks of its disclosed “1981 inventions”;

B) Applicant notes that the “instruction signals” of the past 1981 specification were described as comprising signals which instructed ***preprogrammed*** microcomputers to perform given tasks.

C) Applicant cites an outside *Dictionary* definition of the term “program” to show that the term “program” was conventionally used to refer to “computer programming/software”; and

D) Finally, applicant argues that when one combines the above “engineered” teachings from his past 1981 Parent specification together, based on the cited *Dictionary* definition of “program”, one “implicitly” arrives at the cited *Dictionary* definition of “program.”

However, for a variety of reasons, the tapestry which applicant attempts to weave falls apart at the slightest touch:

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<sup>16</sup> Again, what might be “implied” by the 1981 disclosure is irrelevant to section 112-1 support issues. Section 112 support for a claimed feature is only provided if the claimed feature was actually disclosed; i.e. the feature must at least be “inherent” in the disclosure (not simply “implicit”).

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A) When one actually looks at the way in which the 1981 “programming” terminology was coined and used throughout applicant’s past 1981 Parent specification, i.e. the context in which it actually appears, one finds that the 1981 “programming” terminology unquestionably referred to signaling which represented scheduled TV/Radio shows (and not to “computer software” as applicant now wishfully alleges). In this regard, one finds that applicant’s past 1981 Parent specification distinctly distinguished the 1981 “instruct signals” from the 1981 “programming” into which said 1981 “instruct signals” were embedded. Specifically, the past 1981 parent specification leaves absolutely no doubt that said 1981 “instruct and information signals” constituted ancillary/auxiliary signaling that was “associated” with, and embedded within, respective TV/Radio “programming”:

***“One method provides a technique whereby a broadcast or cablecast transmission facility can duplicate the operation of a television studio automatically through the use of instructions and information signals embedded in programming either supplied from a remote source or sources or prerecorded” (emphasis added)***

[lines 32-37 of column 3]<sup>17</sup>

***“Signal processor, 71, has means, described above, to identify and separate the instruction and information signals from their associated programing and pass them, along with information identifying the channel source of each signal, externally to code reader, 72.” (emphasis added)***

[lines 3-7 of column 11]

***“The cable head end facility contains signal strippers, 81, 85, and 89, of which models exist well known in the art, that controller/computer, 73, can instruct to remove signals from the programing as required, and signal generators, 82, 86, and 90, also known in the art, that***

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<sup>17</sup> Citations have been obtained from US Patent #4,694,490.

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***controller/computer, 73, can instruct to add signals to programming as required”***

[lines 36-42 of column 12]

***“One particular advantage of these methods for monitoring programming is that, by locating the identifier signals in the audio and/or video and/or other parts of the programing that are conventionally recorded by, for example, conventional video recorders, ...”***

[lines 25-29 of column 16]

***“Methods for Governing or Influencing the Operation of Equipment that is External to Conventional Television and Radio Sets by Passing Instructions and Information Signal that are Embedded in Television and Radio Programing Transmissions to Such External Equipment” (emphasis added)***

[Lines 34-38 of column 17]

***“Signal processor apparatus have the ability to identify instruction and information signals in one or more inputted television and radio programing transmissions” (emphasis added)***

[lines 39-41 of column 17]

***“Microcomputer, 205, is preprogrammed to respond in a predetermined fashion to instruction signals embedded in the “Wall Street Week” programing transmission.... These [embedded instruction] signals instruct microcomputer, 205, to generate several video graphic overlays...” (emphasis added)***

[lines 42-49 of column 19]

***“At this point, an instruction signal is generated in the television studio originating the programming and is transmitted in the programming transmission” (emphasis added)***

[lines 60-63 of column 19]



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Given the above, it still seems ridiculous for applicant to suggest that the term “programming”, e.g. in the context of the past 1981 specification”, referred to “computer software” (or even that it referred to applicant’s 1981 “instruct and information signals”).

B) It is also quite clear from applicant’s 1981 past parent specification that the “microcomputers” on the receiver side of the disclosed 1981 inventions were “**preprogrammed**” with the “computer programming/software” which told them *how to respond* to detected “instruct signals” that were embedded within received TV/Radio “programming.” More specifically, it seems quite apparent that each of the 1981 “instruct signals” of applicant’s 1981 inventions represented typical cuing-type signals/commands which instructed/triggered “**preprogrammed**” microcomputers to execute respective portions of preprogrammed software in order to perform predefined task/operation (e.g. the 1981 “instruct signals” told the 1981 microcomputers “to generate the overlay” whereas the pre-loaded 1981 computer programming/software told said 1981 microcomputers “how to generate the overlay that was to be generated”).<sup>18</sup>

**“Microcomputer, 205, is preprogrammed to respond in a predetermined fashion to instruction signals embedded in the “Wall Street Week” programing transmission....These [embedded instruction] signals instruct microcomputer, 205, to generate several video graphic overlays...”**  
**(emphasis added)**

[lines 42-49 of column 19]

Clearly, contrary to applicant’s erroneous allegations, there is no teaching in applicant’s past 1981 specification indicates that applicant’s 1981 “instruct signals” represented “computer

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<sup>18</sup> This being even more apparent when one reads the teaching of applicant’s past 1981 Parent specification in light of the “enhanced and improved” teachings of applicant’s 1987 CIP specification (i.e. a 1987 specification in which cuing-type signaling was enhanced/improved by the added ability of the 1987 systems to re-program downstream devices via downloaded computer software).

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software/programming” in any conventional sense of such terminology.

C) The past 1981 parent specification does not offer/provide a signaling mechanism and/or structure which would have been capable of handling the large continuous sequence of data bytes required to push “computer software” through TV and/or Radio networks. Such a signaling mechanism and structure was not provided until “SPAM” packeting was introduced via applicant’s subsequently filed instant 1987 CIP specification. Thus, applicant’s past 1981 parent specification was not enabling of the alleged “computer programming/software” feature (i.e. the alleged “computer programming/software” feature that the past 1981 specification did not even describe/disclose).

**16)** On page 150 of the amendment filed 1/28/2002 in 08/470,571, applicant states:

***“The 1981 specification states:***

***It is the object of this invention to unlock this potential by the development of means and methods which permit programming to communicate with equipment that is external to television receivers and radio receivers, particularly computers and computer peripherals such as printers***

***1981 Spec., Col. 1, ll.36-41***

***Thus applicants’ 1981 specification makes it clear that ‘programming’ is not just TV and Radio shows- it can also include instructions, codes, and signals that are communicated to and control e.g., computers and computer peripherals. These instructions, codes, and signals clearly fall within the definition of programming and to find otherwise is to conveniently and purposefully***

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**overlook the entire purpose of the invention.” (emphasis added)**

The examiner disagrees with applicant's analysis as to the meaning of the cited excerpt. In reading the 1981 Specification, it seems that **“the *entire purpose*”**<sup>19</sup> to which applicant alludes was the ability to provide multimedia presentations in which TV or Radio “programming” was be displayed along with another supplemental media presentation; wherein the content of the supplemental media presentation was related to the content TV and Radio “programming” thereby *enhancing* the content of the displayed TV and Radio “programming”. To achieve this goal, ancillary “instruct signals” and/or other ancillary “information signals” were “associated” with, and “embedded” within, the TV or Radio “programming.” These embedded “instruct and information signals” allowed received TV and Radio *programming* “to communicate” with equipment that was external to the TV and Radio receivers in order to produce the supplemental media presentation. Specifically, the associated “instruct and information signals”, which were embedded within the received Radio or TV “programming”, were themselves transferred to the external equipment thereby causing the external equipment to produce said supplemental media presentations. Being such, it is still crystal clear to the examiner that the 1981 “programming” terminology was used in a conventional sense by the 1981 specification so as to refer to TV and Radio signaling which represented scheduled TV and Radio shows. To suggest otherwise is to conveniently and purposefully ignore the fact that applicant's 1981 specification clearly distinguished the associated “instruct and information signals” as being separate/distinct entities with respect to the “programming” (i.e. the radio/TV shows) into which these associated “instruct and information signals” were embedded:

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<sup>19</sup> The examiner notes that applicant's 1981 inventions appear to serve many purposes. Therefor, the examiner does not believe that “the invention” of applicant's 1981 specification has one “entire purpose” as is now alleged by applicant; i.e. if it does have one “entire purpose”, then it is not clear to the examiner what that “entire purpose” actually is.

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"One method provides a technique whereby a broadcast or cablecast transmission facility can duplicate the operation of a television studio automatically through the use of **instructions and information signals embedded in programing** either supplied from a remote source or sources or prerecorded" (emphasis added)  
[lines 32-37 of column 3]<sup>20</sup>

"Signal processor, 71, has means, described above, **to identify and separate the instruction and information signals from their associated programing** and pass them, along with information identifying the channel source of each signal, externally to code reader, 72." (emphasis added)  
[lines 3-7 of column 11]

"The cable head end facility contains signal strippers, 81, 85, and 89, of which models exist well known in the art, that controller/computer, 73, can instruct **to remove signals from the programing** as required, and signal generators, 82, 86, and 90, also known in the art, that controller/computer, 73, can instruct **to add signals to programing as required**" (emphasis added)  
[lines 36-42 of column 12]

"One particular advantage of these methods for monitoring programming is that, by locating the **identifier signals in the audio and/or video and/or other parts of the programing** that are conventionally recorded by, for example, conventional video recorders, ..." (emphasis added)  
[lines 25-29 of column 16]

"Methods for Governing or Influencing the Operation of Equipment that is External to Conventional Television and Radio Sets **by Passing Instructions and Information Signal that are Embedded in Television and Radio Programing Transmissions to Such External Equipment**" (emphasis added)  
[Lines 34-38 of column 17]

"Signal processor apparatus have the ability **to identify instruction and information signals in one or more inputted television and radio programing transmissions**" (emphasis added)  
[lines 39-41 of column 17]

"Microcomputer, 205, **is preprogrammed to respond in a predetermined fashion to instruction signals embedded in the "Wall Street Week" programing transmission....**These [embedded instruction] signals instruct microcomputer, 205, to generate several video graphic overlays..." (emphasis added)  
[lines 42-49 of column 19]

"At this point, **an instruction signal is generated in the television studio originating the programming and is transmitted in the programming transmission**" (emphasis added)  
[lines 60-63 of column 19]

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<sup>20</sup> Citations have been obtained from US Patent #4,694,490.

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17) Applicant clearly failed to carry his original 1981 disclosure forward into the instant 1987 disclosure <sup>21</sup>. Because of this, applicant has forfeited his right to now claim any subject matter that was set forth in the disclosure of his originally filed 1981 parent application, but was not carried forward into the disclosure of his originally filed 1987 parent application <sup>22</sup>. Thus, APPLICANT IS CLEARLY WRONG when he alleges that he can secure a 1981 priority date for that which is now claimed by showing "possession" of that which is now claimed via the original disclosure of his 1981 parent application (i.e. NOT for the subject matter that was left behind!). Specifically, not only must applicant show that he possessed the subject matter that is now claimed with respect to the original 1981 disclosure but, more importantly <sup>23</sup>, applicant must first show possession of the same claimed subject matter with respect to the instant 1987 disclosure. Stated another way, to secure priority, applicant must be able to show that he did not forfeit his right to claim the subject matter possessed in his originally filed 1981 parent application by showing, *independently* <sup>24</sup>, that he possessed this same subject matter via the originally filed disclosure of his present application too (i.e. with 1987 disclosure).

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<sup>21</sup> The examiner notes that applicant failed to incorporate the original disclosure from his 1981 parent application into the original disclosure of his 1987 parent; i.e. the 1981 disclosure was neither formally copied into the 1987 disclosure nor was the 1981 disclosure "incorporated by reference" into the 1987 disclosure. The original 1987 disclosure simply replaced the 1981 disclosure as "THE INSTANT DISCLOSURE" from which all section 112 issues must be analyzed.

<sup>22</sup> As evidenced by testimony given in ITC investigation #337-TA-392, even applicant and/or his counsel seemed unsure as to exactly what subject matter from applicant's 1981 parent ("if any") made it into applicant's 1987 disclosure.

<sup>23</sup> "More important" in the sense that applicant is prohibited from now claiming anything that is not fully supported in accordance with all of the requirements of section 112-1 by the present disclosure (e.g. the disclosure that was originally filed by applicant in 1987). Specifically, the present claims fall under section 112-1 if they are not fully supported by the present 1987 disclosure even if they were, by some remote chance, fully supported by the disclosure of the earlier 1981 parent.

<sup>24</sup> If applicant had formally/properly incorporated the written description from his 1981 parent application into his originally filed 1987 disclosure, then there would be no need for these "independent" showings; i.e. applicant could have established "possession" via the originally filed disclosure of his 1981 application alone. It is only because applicant failed to formally/properly incorporate the written description from his 1981 parent into his originally filed 1987 disclosure, that such "independent" showings of "possession" are needed; i.e. because the actions taken by applicant have in fact caused the forfeiture of his right to now claim that subject matter from his 1981 disclosure which was not carried forward into the 1987 application.

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18) Applicant is only entitled to claim subject matter which was set forth within the originally filed 1987 disclosure of his present application in accordance with ALL of the requirements of section 112-1. Specifically, the examiner refutes applicant's allegations that the original disclosure of his 1981 parent application can be used in place of the instant 1987 disclosure to meet one or more of the section 112-1 requirements (namely, to establish "possession" of that which is now claimed). It is only after proper section 112 support (i.e. including "possession") has first been established for the pending claims from the disclosure of the present application (the 1987 disclosure), that there is even a need to consider applicant's 1981 parent application at all. Simply put, if the pending claims are not supported under section 112-1 by applicant's present disclosure as originally filed, then the pending claims themselves fail to comply with the requirements of section 112-1 and no further questions need be asked<sup>25</sup>. Again, because applicant failed to formally/properly incorporate his 1981 disclosure into his 1987 disclosure, applicant is prohibited from relying on his 1981 disclosure to supplement his present 1987 disclosure (i.e. at least as far as complying with the requirements of section 112-1 is concerned). Stated another way, because applicant's 1981 parent application was never formally incorporated into applicant's present 1987 disclosure, it does not constitute part of applicant's 1987 disclosure, i.e. the *instant disclosure*, from which all section 112-1 support for the currently pending amended claims must be derived.

19) As was noted above, applicant does not believe that "common subject matter" is a requirement for priority under section 120.

***"[Section] 120 does not require an applicant to demonstrate that the disclosures relied upon under §120 have anything in common besides their ability to separately comply with §112-1 with respect to the claims***

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<sup>25</sup> At least with respect to the issue of "adequate written description".

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***for which priority is sought. Accordingly, the Examiner's focus on comparing the support from the two applications for similarity or common subject matter is improper and irrelevant because all applicants are required to do is satisfy §120 is show that each disclosure meets the requirements of §112-1 for a given claim." (emphasis added)***

[Page 141 of applicant's response filed on 1/28/2002 in application S.N. 08/470,571]

***"Accordingly, the law requires a two part test in which the applicant separately demonstrates § 112 support for each application. In the FOA, the examiner distorts this straightforward test by imposing a third element of the test whereby the § 112 support from each application consists of 'common subject matter.'"***

[see the last 10 lines on page 137 of the response filed on 1/28/2002 in SN 08/470,571].

Being such, applicant does not even pretend that the subject matter that is now being claimed in his many applications represents "common subject matter" between the instant 1987 CIP specification and the past 1981 parent specification. Instead, applicant is happy to allege the benefit of section 120 priority for that which is claimed based only on alleged "correlated subject matter" between his 1987 and 1981 specifications; e.g. NOTE:

a) That Appendix C of applicant's response filed 6/7/2000 sets forth alleged "correlations" between respective 1981 and 1987 disclosures; and

b) That the claim by claim showing of alleged 1981 and 1987 section 112 claim support in Appendix A of applicant's response filed 6/7/2000 seem to regurgitate many of the alleged "correlations".

The examiner, on the other hand, believes that "common subject matter" is in fact a requirement of section 120. Thus, the examiner maintains that applicant's allegations pertaining to the existence of "correlated subject matter" are irrelevant to the issue of section 120 priority because "common

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subject matter”, not “correlated subject matter”, is required under section 120.<sup>26</sup>

An extreme example of just how far applicant has been willing to distort section 120 in an effort to obtain the 1981 priority date for ones of the pending amended claims can be found in the claim chart for claim 123 within APPENDIX A of applicant’s response filed 6/7/2000 in SN 08/470,571. In this claim chart, applicant alleges that the recitations of claim 123 find section 112-1 support via the “Super Discount Supermarkets” embodiment of the instant 1987 disclosure while alleging that this claimed 1987 “Super Discount Supermarkets” embodiment is entitled to the 1981 filing date of the parent application based on the 1981 “Wall Street Week” embodiment. The examiner disagrees. Specifically, the examiner maintains that the 1987 “Super Discount Supermarkets” embodiment and the 1981 “Wall Street Week” embodiment do not constitute “common subject matter” and therefore the claimed 1987 “Super Discount Supermarkets” embodiment is not entitled to the 1981 filing date of the 1981 “Wall Street Week” embodiment as alleged.

20) In lines 3-7 on page 11 of the supplemental response filed 5/06/2002 in SN 08/470,571, applicant states:

***“the starting point for determining whether an applicant is entitled to priority under section 120 is what is being claimed. Without identifying precisely what is being claimed, it is impossible to seriously undertake an analysis of whether sufficient support exists in both applications thus entitling applicants to a 1981 priority date”.***<sup>27</sup>

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<sup>26</sup> See part “A)” of “SECTION I” in the last Office action of SN 08/470,571.

<sup>27</sup> The examiner agrees with applicant’s position noting that, without being able to identify precisely what it is that is being claimed, it is impossible to seriously undertake many other examining related activities too .



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The examiner was a bit surprised that applicant raised this issue after all of the section 112-1 requests which have been made by the Office throughout the present prosecution in hopes of getting applicant's clarification as to *precisely what it is* that applicant claims. In fact, the Office continues to struggle in its efforts to make such determinations for the 10,000 or so pending amended claims. In the past, when applicant has been asked to identify "*precisely what is being claimed*", applicant has declined <sup>28</sup> to provide such showings instead opting to take the positions:

A) That it is the examiner's job, not applicant's, to read and understand the 557 pages of applicant's current 1987 CIP specification in order to determine "precisely what it is being claimed" via applicant's 10,000 or so pending claims; and

B) That at least some of the limitations of applicant's 10,000 or so pending claims are actually directed to subject matter that is not described within in the instant 1987 CIP specification.

***"the [examiner's] assumption that 'all limitations of the currently pending claims are necessarily directed to that which is described in the present 1987 disclosure' is mistaken and wholly unsupported."*** <sup>29</sup>

[lines 8-10 on page 144 of the amendment filed in 08/470,571 on 1/28/2002].

Hence applicant does not wish to cite, or indeed is unable to cite, section 112-1 support from the instant CIP disclosure for these limitations [e.g. often times out of an expressed fear that a court, at some later date, might actually hold the scope/meaning of these limitations as being directed to subject matter that was actually disclosed within the instant 1987 CIP specification].

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<sup>28</sup> A notable exception being the most helpful claim charts of alleged "dual" section 112 support which applicant has, only on a few occasions, been willing to kindly provide [e.g. APPENDIX A in the amendment filed 6/7/2000 in 08/470,571].

<sup>29</sup> Contrary to applicant's position, the examiner maintains that a pending claim must necessarily be directed to that which is described in the instant 1987 specification. This is not to say that the resulting scope of the pending claim is limited only to that of the 1987 specification to which it must necessarily be directed.

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In regard to the section 112-1 issue that has now been raised by applicant, the following positions continue to be taken by the present examiner:

A) It has always been a desire of the Office to determine “precisely what it is” that applicant now claims. Being that it still remains so unclear as to “precisely what it is” that applicant now claims, clarification on the part of applicant is once again formally requested for the 10,000 or so pending claims. For the record, the current examiner has found applicant’s claim charts of alleged “dual” section 112-1 support to be the most helpful form of aid that applicant has provided to date because it at least attempts to match each claimed limitation to the specific teachings in the specification(s) that they are allegedly directed;<sup>30</sup> and

B) The examiner continues to adopt the positions expressed by Judge Luckern at the ITC:

1) “that the specification of the ‘277 patent [the 557 pages of the instant 1987 specification] is difficult to understand, as it is dealing with many possible systems”;

2) “that despite complainant’s [i.e. the current applicant’s] attempts to point to the specification of the ‘277 patent [the 557 pages of the instant 1987 specification] as illustrative of some claim elements, said specification has not been helpful in connecting individual claim language to distinct statements in the specification of the ‘277 patent that is supposed to provide an explanation of the claimed systems in issue”;

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<sup>30</sup> The process of showing a limitation-to-disclosure match for each limitation of each claim should be an easy task for applicant, if not a trivial one, being that the currently pending claims must be “*clearly anticipated*” by the teachings of applicant’s instant disclosure.

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3) “that complainant’s [i.e. the current applicant’s] assertions in many instances of where support in the specification of the ‘277 patent [the 557 pages of the instant 1987 specification] can be found for claimed elements ‘reads like the directions to a treasure hunt. There’s a piece here, there’s a piece there, it’s in there somewhere.’”; and

4) “ that the specification of the ‘277 patent [the 557 pages of the instant 1987 specification] and the claims in issue ‘are like ships passing in the night in the same ocean, but not necessarily sailing in the same direction.’”  
[SEE: 1997 ITC Lexis 307, \*258 (part I of II)]

**Once again, the examiner hereby requests applicant’s help in determining “precisely what it is” that applicant now claims.**

21) The examiner notes that the “SPAM” technology, on which the “more sophisticated” systems of applicant’s present 1987 disclosure are based, is vastly different from the “cuing-type signal” technology on which the “primitive” systems of applicant’s 1981 parent application were based; e.g. the ability of SPAM to carry and distribute “software” being but just one of the more notable differences. Clearly, the “more sophisticated” 1987 alleged inventions that are now *necessarily being claimed* are not entitled to the 1981 filing date of their 1981 “primitive” ancestors; i.e. applicant is not allowed to transport his “more sophisticated” 1987 alleged inventions back in time to the 1981 filing date of his different, albeit sometimes “correlated”, “primitive” 1981 alleged inventions.

22) The issues cited above illustrate a further dilemma that the examiners have faced when trying to read and understand that which is now being claimed by applicant. Specifically, terminology which might seem definite when one looks to the instant 1987 disclosure alone, becomes confusing

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and indefinite when read in light of applicant's responses; responses in which applicant has applied newer 1987 interpretations/definitions to the claims in order to establish section 112-1 support and has applied older and different 1981 interpretations/definitions to the same claims in order to obtain the 1981 priority date for the recitations (this approach is evident throughout appendix A of applicant's last response). Thus, at times, it seems to be the record itself that has, or that has at least contributed to, making the meaning and scope of the claims' recitations so unclear. It must also be noted that the claim recitations themselves are often contorted in the attempt to craft them to read independently on different teachings from the two disclosures<sup>31</sup>. Not only does this process results in claim limitations that are difficult to read in that they do not quite fit teachings from either disclosure, but more importantly, the effort involved in this process is wasted effort because the subject matter being claimed/referenced in the two disclosures is not "common subject matter"; e.g. the claims are not entitled to the 1981 filing date even if it could be shown that they can be read on respective (but different) subject matter from the two disclosure (a situation that is also quite evident from appendix A of applicant's last response).

Even so, given a record in which applicant continues to argue that his pending claims are entitled to the 1981 priority date because they can be read in different ways on the 1981 and 1987 disclosures, a situation is created in which the "broadest reasonable meaning" of a claim's limitations takes on one meaning when defined by the file history itself ( e.g. when based on applicant's attempt to read each claims' limitations, improperly, onto two completely different disclosures), and takes on a different meaning when defined, properly, from the originally filed 1987 disclosure

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<sup>31</sup> For example, applicant's claims now recite "downloadable processor instructions" which has no antecedent basis in either of the originally filed 1987 and 1981 disclosures. Yet it appears that this recitation could, quite properly, be read on the originally described "program instruction sets" (e.g. downloaded software) of applicant's instant 1987 disclosure. However, when one looks at appendix A of applicant's last response, one finds that applicant has attempted to read the recitation not on the originally described "program instruction sets" of the instant disclosure, but instead on respective (and different) commands/instructions from the 1981 and 1987 disclosures both of which functioned only to trigger actions/operations on the receiver side. Applicant resorts to this interpretation apparently out of recognition that the "program instruction sets"/software of the instant 1987 disclosure has no equivalent in the 1981 disclosure. What results from this process is a claim which looks like it is literally directed to the downloading of software that was described only in the 1987 disclosure, and yet has been afforded the 1981 effective filing of a parent application in which such a feature was not disclosed (i.e. effectively transporting the 1987 "downloading of software" feature back in time to the 1981 date of the parent application in which it was not disclosed).

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by itself. Should the examiner apply the "prior art" according to the interpretations afforded by applicant's 1987 disclosure alone (as is proper), or should the examiner apply the "prior art" according to the interpretations created by applicant via his improper reliance on different subject matter from the different 1981 and 1987 specifications? No matter how you cut it, the result is confusion!

**23)** The following position taken by Judge Rich demonstrates that "continuity of disclosure", needed to establish the benefit of priority under section 120, requires continuity of "common subject matter" in a form that meets all of the requirements of section 112-1; e.g. even continuity of "best mode".

**"It must be understood that the introduction of a new best mode disclosure would constitute the injection of 'new matter' into the application and automatically deprive the applicant of the benefit of the earlier filing date of the parent or original application for any claim whose validity rests on the new best mode disclosure".**

TRANSCO [38 F.3d 551; 32 U.S.P.Q.2D (BNA) 1077]

**24)** At times, applicant seems to be of the opinion that *only* the "enablement" requirement of section 112-1 applies to the issue of "continuity". At other times, applicant seems to be of the opinion that *only* the "description" requirement of section 112-1 applies to the issue of "continuity". On its face, one of these two positions must be wrong (i.e. they are mutually exclusive). In reality, both positions are wrong. As evidenced above, **ALL** of the requirements under section 112-1 apply to the issue of "continuity" ( e.g. even "best mode"). Being such, applicant is only entitled to the benefit of an earlier filing date for claims that are directed to "common subject matter" for which "continuity" has been maintained between the present and the earlier filed application.

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“Continuity of common subject matter” exists between applications only when there is:

- A) Continuity of “written description” between applications for the subject matter being claimed (as defined under section 112-1);
- B) Continuity of “enablement” between applications for the subject matter being claimed (as defined under section 112-1); *and*
- C) Continuity of “best mode” between applications for the subject matter being claimed (as defined under section 112-1).  
[note sections 14 and 15 above]

Being such, none of applicant’s currently pending amended claims are entitled to the priority date of applicant’s 1981 parent application in that the claims are not directed to “subject matter”<sup>32</sup> for which there is has been:

- a) the required continuity of “written description” between applications;
- b) the required continuity of “enablement” between applications;  
*and*
- c) the required continuity of “best mode” between applications.<sup>33</sup>

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<sup>32</sup> The “subject matter” currently being claimed corresponds to the metes and bounds of the pending amended claims as defined by the instant 1987 CIP specification from which they depend. Obviously, for reasons that have been addressed throughout the record, this 1987 “subject matter” currently being claimed is different from the 1981 “subject matter” which would have been claimed had the metes and bound of these same claims been defined by the past 1981 parent specification instead; i.e. evidencing the lack of continuity in “common subject matter” with respect to that which is claimed.

<sup>33</sup> e.g. applicant has argued that he was under no obligation to update his earlier filed disclosure with his “new best mode” when originally filed the present disclosure. The examiner strongly agrees. However, to maintains continuity between applications, applicant was required to at least carry forward the “old best mode” from of his earlier filed application into his originally filed present disclosure. Applicant failed to do this and therefor has not maintained “continuity of disclosure”. For example, as was noted in part “13” of this paragraph, the “old best mode” of applicant’s 1981 parent application was based exclusively on primitive 1981 cuing technology while the “new best mode” of applicant’s present application was based exclusively on the more sophisticated 1987 “SPAM” technology (i.e. extended Teletext technology). In view that the primitive 1981 cuing technology was not carried forward into the present 1987 application, e.g. applicant’s new 1987 disclosure literally replaced applicant’s earlier filed 1981 disclosure in its entirety, the “old best mode” was in fact left behind (i.e. it had to be!). For this reason alone, the pending amended claims are not entitled to the 1981 priority date of applicant’s parent application. Again, the pending amended claims are necessarily

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**25)** It is understood that CIP practice allows an applicant to file a new application containing additional/new subject matter while preserving the applicant's right to claim (and the right to the earlier filing date for) subject matter which was previously disclosed in the parent application. But an applicant's right to claim subject matter from the parent application is only preserved for that subject matter of the parent application which has actually been carried forward (e.g. *incorporated*) into the disclosure of the CIP. Any and all subject matter from the parent application that is not carried forward into the disclosure of the CIP cannot be legally claimed within said CIP; i.e. the right to claim subject matter that is left behind is lost/forfeited with respect to said CIP application. To prevent such a loss/forfeiture, it is common for an applicant to draft the disclosure of his CIP application so that it literally incorporates the entire disclosure of the parent application, e.g. either physically or "by reference", thereby literally carrying forward all of the subject matter from the parent application into the CIP application and in doing so:

A) Preserving applicant's right to claim any/all of the subject matter from the parent within said CIP application; and

B) Preserving applicant's right to the filing date of the parent application for any/all claims which are directed to the subject matter of the parent application that has been carried forward into the CIP application.

In contrast to the common CIP practice described above, when filing his 1987 CIP disclosure, the present applicant elected to draft an entirely new specification and elected not to formally incorporate the disclosure from his

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directed to the systems/methods of applicant's present 1987 disclosure which is based on the more sophisticated "SPAM" technology". Accepting applicant's claim to a 1981 priority date for these pending amended claims would allow applicant to transport claims which are necessarily directed to the 1987 disclosure/technology back in time to the 1981 date of the earlier disclosure/technology. Using this scheme, applicant would be able to improperly transport his new 1987 "best mode"/technology back in time to the 1981 date of his "old best mode"/technology.

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1981 parent application in its entirety. In fact, when filing his 1987 CIP disclosure, applicant elected to draft the entirely new specification in a way which makes it difficult to impossible to determine if any of the subject matter from his 1981 parent was carried forward into the disclosure of his CIP <sup>34</sup>. Today, faced with the fact that subject matter which was not carried forward (i.e. *incorporated*) into the present disclosure has been lost/forfeited, applicant takes a leap of faith by suggesting that all of the subject matter from his 1981 parent application somehow/miraculously found its way into the new disclosure of his 1987 CIP. Clearly, this is not true. In fact, when one studies the two disclosures in detail, one actually finds that little to none of the subject matter from the 1981 parent made it into the 1987 CIP disclosure in a form that constitutes "common subject matter". For example, even the subject matter from the two disclosures which looks similar at first glance, is based on vastly different transmission technologies, different scopes/meaning/interpretations, and on a new "best mode" [e.g. note Appendix II of the Office action mailed 8/27/01 in SN 08/470,571]. Being such, it does not appear that any of applicant's currently pending amended claims are entitled to the 1981 date of applicant's parent application.

26) In the past, applicant seems to have suggested that even if one were to find that applicant's 1981 disclosure had not been carried forward into applicant's later filed 1987 disclosure, one/applicant could still rely on said 1981 disclosure to provide an understanding of the later filed 1987 disclosure with respect to issues under section 112. The examiner notes that only "prior art" can be used for such purposes. Therefor applicant's 1981 can only be used to clarify/supplement his 1987 disclosure if it is found to be "prior art" with respect to the 1987 disclosure. But if the 1981 disclosure is "prior art" for applicant's suggested purpose (i.e. for the purpose of understanding the later filed 1987 disclosure), then it must be "prior art" for issues under sections 102 and 103 too. Thus, for applicant to suggest that his 1981 disclosure be used as "prior art" for the purpose of

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<sup>34</sup> For example: the 1987 CIP appears to have injected a "new best mode disclosure" by literally replacing the 1981 inventions with new 1987 inventions which, by itself, refutes all claims of priority to the 1981 filing date.



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understanding his 1987 disclosure seems to put applicant, at least potentially, on a very slippery slope; i.e. because if applicant's position were ever *legally* accepted, then applicant's 1981 disclosure would *legally* become "prior art" against the 1987 disclosure for sections 102 and 103 issues too.<sup>35</sup>

27) The examiner notes that many of applicant's pending claims recite the following receiving station structures: a) a receiver; b) a signal detector; c) a processor; and d) an output device. Appendix A of the response filed on 6/7/2000 in SN 08/470,571 shows that:

- a) the recited "receiver" refers to nothing more than --a TV tuner--;
- b) the recited "signal detector" refers to nothing more than a decoder 203 which extracts and error corrects embedded information from the VBI of TV programming;
- c) the recited "processor" refers to nothing more than microcomputer 205; and
- d) the recited "output device" refers to nothing more than a "TV monitor".

The examiner maintains that all of these recited structures are found within a conventional CPU/MP/computer implemented Teletext receivers. For example, note:

- a) the TV tuning element (2);
- b) the extracting and decoding circuitry 8 and 11;
- c) the processing element (13); and
- d) the TV monitor/display (6),  
of BETTS [GB 1,556,366].

Such further highlights the direct correlations that exists between the "SPAM" distribution system of applicant's alleged invention and the "Teletext" distribution systems of the "prior art". Again, the examiner believes that applicant's "SPAM" is, for all intents and purposes,

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<sup>35</sup> For the record: applicant's 1981 disclosure does not constitute "prior art" with respect to applicant's 1987 disclosure and therefor cannot serve as "prior art" for any purposes. Thus, applicant's 1981 disclosure cannot be used to supplement ones understanding of applicant's 1987 disclosure, with respect to issues under section 112-1, as seems to have been improperly suggested by applicant in the past. Specifically, with respect to section 112 issues, applicant's 1987 disclosure *stands alone*.

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synonymous with conventional "Extended Teletext" [note part "5)" of this section];

**28)** Applicant's originally filed instant disclosure clearly taught away from the "interactive" ultimate receiver station configuration which has been claimed during the present prosecution [note claim 56 as presented in the amendment filed 6/7/2000 and 7/13/2000 in 08/470,571]. Namely, as originally described, one of the key advantages that was allegedly offered by applicant's alleged inventions was the fact that the "ultimate receiver stations" produced their respective personalized audio/video presentation "automatically" and without any manual input from the viewer; e.g. whereby the complex processing that was involved within the system remained hidden from, and transparent to, the viewer/user; SEE:

A) lines 27-34 on page 11 of applicant's instant disclosure as originally filed;

B) lines 18-20 on page 91 of applicant's instant disclosure as originally filed;

C) lines 13-34 on page 427 of applicant's instant disclosure as originally filed;

D) etc,...

Despite this original teaching, applicant has subsequently attempted to introduce pending amended claims into the record which, according to applicant's own allegation (see the support for claim 56 as was set forth in APPENDIX A of the amendment filed on 6/7/2000 in SN 08/470,571), recite an "interactive" implementation of the originally disclosed non-interactive "ultimate receiver stations". The section 112-1 problem is immediately apparent [also note the arguments set forth in latest Office action of SN 08/470,571].

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29) As originally described, it appears that the “ultimate receiver stations” of applicant’s alleged invention produced the combined image of applicant’s figure 1C by (apparently) additively mixing the images of figures 1A and 1B in their entirety; i.e. this fact seems to explain why the “line” of figure 1A had to be produced “on a background color that is transparent when overlaid on a separate video image” as was described in applicant’s originally filed disclosure [see lines 9-14 on page 25 of applicant’s instant disclosure]. Despite this original teaching, applicant now attempts to introduce claims which recite a process in which the respective images are now combined in less than their entirety and/or in which one portion of one image is “replaced” by a portion of another. The section 112-1 problem is immediately apparent [note the latest Office action in SN 08/470,571].

30) In the first two lines under the heading “a. *Independent Claim 56 and Dependent Claims Thereto*” on page 287 of the response filed 1/28/2002 in SN 08/470,571, applicant alleges that the publication date of the applied Gunn et al article was never established by the Office. This allegation is untrue. The following is noted:

a) This Gunn et al. article was originally submitted by applicant for consideration within voluminous IDS citations. However, as with many of these citations, applicant never provided the Office with information regarding the publication date of the article;

b) The Gunn et al. article has been applied by the Office against many of applicant’s pending claims, and while applicant never provided the Office with the article’s publication date, the Office was able to establish the date in question and notified applicant of it accordingly [note: the PTO- 892 of paper #2 in the present 08/470,571 record; the PTO-892 of paper #20 in SN 08/447,502; etc,...];

c) Again, the publication date for this Gunn et al. article, e.g. an article that was submitted by applicant for consideration against the pending amended claims, is March 26-28 of 1980. This date is, by any standard, valid “prior art” against all of applicant’s pending claims.

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**31)** etc,...

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**SECTION II:** (section 112-2 rejections)

**1. Claims 2-11 and 13-39 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

1) Claim 2 recites:

a) an “information transmission” into which a “unit of data” can be embedded by a signal generator [i.e. lines 2 and 3];

b) a broadcast “information transmission” that is transmitted by at least one transmitter [i.e. lines 4 and 5];

c) a cablecast “information transmission” that is transmitted by said at least one transmitter [i.e. lines 4 and 5].

In claim 2, line 8 and 9, “said information transmission” has multiple antecedent basis and is indefinite because it is not clear to which of the previously recited “information transmissions” it refers.

a) the recited “information transmission” of line 4 **prior to the embedding** of first data and/or control signals; or

b) the previously recited “information transmission” of lines **after the embedding** of first data and/or control signals.

Specifically, it is not clear whether the “information transmission” that is *communicated* in line 10 of claim 2 is: that which contains embedded data/control signals [i.e. that which is produced by the *embedding* step recited in lines 8 and 9 of claim 2]; or that which does not contain the embedded data/control signals [i.e. that which existed prior to the *embedding* step recited in lines 8 and 9 of claim 2].

Clarification is needed.

2) Claim 2 recites:

a) an “information transmission” into which a “unit of data” can be embedded by a signal generator [i.e. lines 2 and 3];

b) a broadcast “information transmission” that is transmitted by at least one transmitter [i.e. lines 4 and 5];

c) a cablecast “information transmission” that is transmitted by said at least one transmitter [i.e. lines 4 and 5];

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d) the “information transmission” of lines 8 and 9 which exists **prior to the embedding** of first data and/or control signals into “said information transmission”; and

e) the “information transmission” of lines 8 and 9 which exists **after the embedding** of first data and/or control signals into “said information transmission”.

In claim 2, line 10, “said information transmission” has multiple antecedent basis and is indefinite because it is not clear to which of the previously recited “information transmissions” it refers. For example, is “said information transmission” that is being *communicated* in line 10 of claim 2: that which contains embedded data/control signals [i.e. that which is produced by the *embedding* step recited in lines 8 and 9 of claim 2]; that which does not contain the embedded data/control signals [i.e. that which existed prior to the *embedding* step recited in lines 8 and 9 of claim 2]; or is it some other type of previously recited “information transmission”.

Clarification is needed.

3) In claim 2, line 11, “said information transmission” has multiple antecedent basis and is indefinite because it is not clear to which of the previously recited “information transmissions” it is intended to refer: e.g.

1) that of line 4?

2) that of lines 8 and 9 into which first data and/or first control signals were to have been embedded (that which exists prior to the embedding step)?

c) that of lines 8 and 9 into which first data and/or first control signals had already been embedded ( that which exists after the embedding step )?

d) that of line 10 which was communicated to the transmitter?

e) some other version/state of a “said information transmission”.

Similar clarification is also needed in line 18.

4) Claim 3 is a method claim and therefor must positively recite all of the steps (i.e. active steps of manipulation) which comprise the method that is being claimed. However, currently drafted claim 4 is confusing and appears to be incomplete because many of its limitations suggest/indicate that there are required active steps of manipulation which have not been positively recited as being part of the recited method that is being claimed. For example:

A) Lines 4 and 5 seem to suggest that the method being recited actually requires:

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1. A step for “providing” one of a broadcast or cablecast information transmission from an origination transmitter station; and
2. A step for “receiving” the provided one of a broadcast or cablecast information transmission from an origination transmitter station via “at least one receiver” located at one of the remote broadcast or cablecast transmitter stations.

Yet claim 4 fails to positively recite these implied steps. Clarification is needed (i.e. does the recited method require the implied steps or not?); and

B) Lines 5-7 seem to suggest that the method being recited actually requires:

1. A step for embedding “data” in the one of the broadcast or cablecast information transmission which was received via said “at least one receiver.”

Yet, at best, such a recitation is only positively recited in the alternative if at all [e.g. it is unclear whether lines 16 and 17 are actually directed to the embedding of “data” which occurs at one of the remote broadcast/cablecast transmitter stations or whether it refers to embedding which occurs at the origination transmitter station]. Clarification is needed.

C) The recitation of “for controlling” in line 9 seems to suggest that the method being recited necessary requires a step of “controlling” and yet such a “controlling” step is never positively set forth in the body of the claim [e.g. lines 11-19 fail to positively recite this implied step]. Clarification is needed.

D) The recitation of “the communication of” in line 9 seems to suggest that the method being recited necessary requires a step of “communicating” and yet such a “communicating” step is never positively set forth in the body of the claim [e.g. lines 11-19 fail to positively recite this implied step]. Clarification is needed.

E) The recitation of “the embedding of” in line 9 seems to suggest that the method being recited necessary requires a step of “embedding” and yet such a “embedding” step is never positively set forth in the body of the claim [e.g. lines 11-19 fail to positively recite this implied step]. Clarification is needed.

F) The recitation of “to cause” in line 14 seems to suggest that the method being recited necessary requires a step of “causing” and yet such a “causing” step is

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never positively set forth in the body of the claim [e.g. lines 11-19 fail to positively recite this implied step]. Clarification is needed.

G) The recitation of “to cease embedding” in line 14 seems to suggest that the method being recited necessary requires a step of “embedding” that can be “ceased” and yet such an “embedding” step was never positively set forth in the body of the claim [e.g. lines 11-19 fail to positively recite this implied step]. Clarification is needed.

6) In claim 3, line 18, “said one of a broadcast and cablecast information transmission” has multiple antecedent basis and is indefinite. For example, as currently drafted it is unclear as to which of the previously referenced broadcast/cablecast “transmission” is being transmitted in lines 18-19; e.g.

A) “said one of a broadcast and cablecast information transmission” of lines 4 and 5 which is received at the remote broadcast/cablecast transmitter stations?

B) “said one of a broadcast and cablecast information transmission” of lines 12 and 13 which is received at the origination transmitter station?

C) “said one of a broadcast and cablecast information transmission” of lines 16 and 17 into which second data or control signals have been embedded?

D) or to some other state/version of “said one of a broadcast and cablecast information transmission” at some other location/station.

Clarification is needed.

7) In claim 4, line 10, “said transmitter” does not have clear antecedent basis and is indefinite because it is not clear if it is intended to refer back to the “at least one transmitter” of line 4, and if so, which one (or all) of said “at least one” does it in fact refer to. Clarification is needed.

8) Lines 1-10 of claim 4 recite:

- a) a remote broadcast transmitter station (i.e. lines 2 and 3);
- b) a remote cablecast transmitter station (i.e. lines 2 and 3); and
- c) an origination transmitter station (i.e. lines 4 and 5).



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Thus, the recitation of “said transmitter station” in line 12 of claim 4 has multiple antecedent basis and is indefinite because it is not clear to which one of the three previously recited transmitter stations “said transmitter station” refers. Similar clarification is needed in lines 22 and 23).

9) Lines 12 and 13 of claim 4 recite a first “instruct-to-embed signal” that was generated by “said” transmitter station. Lines 17 and 18 of claim 4 recite a second “instruct-to-embed signal” that was generated by a receiver station. The “at least one of” recitation in line 11 of claim 4 means that one or both of these two different “instruct-to-embed signal” can exist within the context of the current claim. The following is noted:

a) The recitation of “*said* instruct-to-embed signal” in line 23 of claim 4 has multiple antecedent basis and is indefinite because it is not clear back to which of the two previously recited instruct-to-embed signals the “said instruct-to-embed signal” recitation of line 23 refers; e.g. does the recitation of line 23 refer back to the “instruct-to-embed signal” of lines 12-13 which was generated by said transmitter station or to the “instruct-to-embed signal” of lines 17-18 which was generated by a receiver station. Clarification is required.

10) Throughout the prosecution of applicant’s current patent application portfolio, the current examiner has often raised concerns over applicant’s seemingly arbitrary/careless injection of the “at least one” terminology into many of applicant’s pending claims. Once again this seemingly arbitrary/careless injection of the “at least one” terminology into the currently pending claims, e.g. line 11 of claim 4, adds unnecessary confusion to the claims and spawns clear section 112-2 problem [e.g. for reasons which are again exemplified with respect to claim 4 in the section that immediately precedes this one]. Hence, applicant is asked to review all of his pending claims and to correct any section 112 problem which are similar that which is exemplified above; i.e. section 112 problem resulting from the seemingly arbitrary/careless injection of the “at least one” terminology into the pending claims.

11) Lines 12 and 13 of claim 4 recite “an instruct-to-embed signal” that was generated by “said transmitter station”, lines 17 and 18 of claim 4 recite “an instruct-to-embed signal” that was generated by a receiver station, and lines 22-24 recite and “instruct-to-embed signal” which was communicated to at least one transmitter. The following is noted:

a) The recitation of “said instruct-to-embed signal” in line 26 of claim 4 has multiple antecedent basis and is indefinite because it is not clear to which of the

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three previously recited instruct-to-embed signals “said instruct-to-embed signal”  
recitation of line 26 refers.

Clarification is required.

12) Claim 4 is a method claim and therefor must positively recite all of the steps which comprise the method that is being claimed. However, currently drafted claim 4 is confusing and appears to be incomplete because many of its limitations suggest/indicate that there are require the steps which have not been positively recited within the claim. For example:

a) Lines 4 and 5 of claim 4 include a “for receiving information from an origination station” recitation which seems to suggest that the method being recited in claim 4 actually includes a “step for receiving information from an origination transmitter station.” Yet such a step is never positively recited within claim 4;

b) Lines 5 and 6 of claim 4 include a “for embedding a unit of data in information to be transmitted” recitation which seems to suggest that the recited method includes a step for “embedding a unit of data in information” and a step for “transmitting the information containing the so embedded unit of data.” Yet such steps are never positively recited within the claim 4;

c) Lines 8 and 9 of claim 4 include a “for controlling the communication of information to and the embedding of information at said signal generator” recitation which seems to suggest that the recited method includes a step for “communicating information to the signal generator”, a step for “embedding information at the signal generator”, and an addition step for “controlling one these two steps via at least one of a processor, a controller, and a computer.” Yet such steps of communicating, embedding, and controlling are never positively recited within claim 4;

d) Lines 11-21 of claim 4 include recitations which seem to suggest that the recited must include at least some of a large number of steps which are only “implied” and are never positively recited within claim 4 as is required of a method claim. For example, this large number of “implied” steps from which required steps of the recited method must be derived include the following:

1. a step for receiving an “instruct signal”,<sup>36</sup>

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<sup>36</sup> This step has been positively recited in line 11 of claim 4 and has been included in the list of “implied” steps only for the

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2. a step for causing at one of “said transmitter station” and “a receiver station” to generate an “instruct-to-embed signal”;
3. a step for embedding first data into some unspecified something at a broadcast transmitter station;
4. a step for embedding a first control signal into some unspecified something at a broadcast transmitter station;
5. a step for embedding first data into some unspecified something at a cablecast transmitter station;
6. a step for embedding a first control signal into some unspecified something at a cablecast transmitter station;
7. a step for causing said embedding of said first data at said broadcast transmitter station to be stopped (i.e. to cease) based on the generated “instruct-to-embed signal” provided by “said transmitter station”;
8. a step for causing said embedding of said first data at said cablecast transmitter station to be stopped (i.e. to cease) based on the generated “instruct-to-embed signal” provided by “said transmitter station”;
9. a step for causing said embedding of said first data at said broadcast transmitter station to be stopped (i.e. to cease) based on the generated “instruct-to-embed signal” provided by “a receiver station”;
10. a step for causing said embedding of said first data at said cablecast transmitter station to be stopped (i.e. to cease) based on the generated “instruct-to-embed signal” provided by “a receiver station”;
11. a step for causing said embedding of said control signal at said broadcast transmitter station to be stopped (i.e. to cease) based on the generated “instruct-to-embed signal” provided by “said transmitter station”;

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12. a step for causing said embedding of said control signal at said cablecast transmitter station to be stopped (i.e. to cease) based on the generated "instruct-to-embed signal" provided by "said transmitter station";

13. a step for causing said embedding of said first data at said broadcast transmitter station to be stopped (i.e. to cease) based on the generated "instruct-to-embed signal" provided by "a receiver station";

14. a step for causing said embedding of said first data at said cablecast transmitter station to be stopped (i.e. to cease) based on the generated "instruct-to-embed signal" provided by "a receiver station";

15. a step for embedding second data into some unspecified something at a broadcast transmitter station;

16. a step for embedding a second control signal into some unspecified something at a cablecast transmitter station;

17. a step for causing said embedding of said second data to begin at said broadcast transmitter station based on the generated "instruct-to-embed signal" provided by "a receiver station";

18. a step for causing said embedding of said second data to begin at said cablecast transmitter station based on the generated "instruct-to-embed signal" provided by "a receiver station";

19. a step for causing said embedding of said second control signal to begin at said broadcast transmitter station based on the generated "instruct-to-embed signal" provided by "a receiver station";

20. a step for causing said embedding of said second control signal to begin at said cablecast transmitter station based on the generated "instruct-to-embed signal" provided by "a receiver station";

21. a step for causing said embedding of said second data to begin at said broadcast transmitter station based on the generated "instruct-to-embed signal" provided by "said transmitter a receiver station";

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22. a step for causing said embedding of said second data to begin at said cablecast transmitter station based on the generated "instruct-to-embed signal" provided by "said transmitter a receiver station";

23. Etc,.....

Clarification is required (i.e. claims 2-4 should be amended so as to positively recite all of the steps which comprise the claim being recited and the functional language which is indicative of "implied" steps should be canceled from the claim). Similar clarification is needed throughout claims 5-11 and 13-39.

13) Claims 5-11 and 13-39 require clarification similar to that which has been exemplified above.

**2. Applicant is asked to review all of the pending claims and to correct any section 112-2 problems that are similar to those which have been exemplified above.**

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### **SECTION III:** (section 112-1 rejections)

Claims 2-11 and 13-39 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

#### **I. Preface:**

In related ITC investigation No. 337-TA-392, the Administrative Law Judge found:

- 1) ¶that the specification of the `277 patent [the 557 pages of the instant 1987 disclosure] is difficult to understand, as it is dealing with many possible systems¶;
- 2) ¶that despite complainant's [the current applicant's] attempts to point to the specification of the `277 patent [the 557 pages of the instant 1987 disclosure] as illustrative of some claim elements, said specification has not been helpful in connecting individual claim language to distinct statements in the specification of the `277 patent that is supposed to provide an explanation of the claimed systems in issue¶;
- 3) ¶that complainant's [the current applicant's] assertions in many instances of where support in the specification of the `277 patent [the 557 pages of the instant 1987 disclosure] can be found for claimed elements `reads like the directions to a treasure hunt. There's a piece here, there's a piece there, it's in there somewhere.'¶; and
- 4) ¶ that the specification of the `277 patent [the 557 pages of the instant 1987 disclosure] and the claims in issue `are like ships passing in the night in the same ocean, but not necessarily sailing in the same direction.'¶

[SEE: 1997 ITC Lexis 307, \*258 (part I of II)]

The examiner adopts these same positions with respect to the pending amended claims at issue within the current application for reasons which will be exemplified via the following discussion.

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**II. With respect to that which is now recited in claim 5:**

1) It is not clear where “said remote receiver” in line 2 of claim 5 was described in the instant disclosure as originally filed. Specifically, it is not clear where the instant disclosure as originally filed described:

- a) “said remote receiver” which generated “**said first data**” [e.g. lines 1 and 2 of claim 5] which was embedded into some undefined something by “said signal generator” [e.g. lines 15 and 16 of claim 2] wherein “said signal generator” was located within a **cablecast** transmitter station [e.g. lines 1-4 of claim 2].

Clarification is needed.

2) It is not clear where “said remote receiver” in line 2 of claim 5 was described in the instant disclosure as originally filed. Specifically, it is not clear where the instant disclosure as originally filed described:

- a) “said remote receiver” which generated “**said first data**” [e.g. lines 1 and 2 of claim 5] which was embedded into some undefined something by “said signal generator” [e.g. lines 15 and 16 of claim 2] wherein “said signal generator” was located within a **broadcast** transmitter station [e.g. lines 1-4 of claim 2].

Clarification is needed

3) It is not clear where “said remote receiver” in line 2 of claim 5 was described in the instant disclosure as originally filed. Specifically, it is not clear where the instant disclosure as originally filed described:

- a) “said remote receiver” which generated “**said first control signal**” [e.g. lines 1 and 2 of claim 5] which was embedded into some undefined something by “said signal generator” [e.g. lines 15 and 16 of claim 2] wherein “said signal generator” was located within a **cablecast** transmitter station [e.g. lines 1-4 of claim 2].

Clarification is needed.

4) It is not clear where “said remote receiver” in line 2 of claim 5 was described in the instant disclosure as originally filed. Specifically, it is not clear where the instant disclosure as originally filed described:

- a) “said remote receiver” which generated “**said first control signal**” [e.g. lines 1 and 2 of claim 5] which was embedded into some undefined something by “said signal generator” [e.g. lines 15 and 16 of claim 2]

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wherein "said signal generator" was located within a **broadcast** transmitter station [e.g. lines 1-4 of claim 2].  
Clarification is needed

**III. With respect to that which is now recited in claim 4:**

- 1) It is not clear where the "data" of line 2 was described in the instant disclosure as originally filed. Clarification is needed.
- 2) It is not clear where the "control signals" of line 2 were described in the instant disclosure as originally filed. Clarification is needed.
- 3) It is not clear where the "remote broadcast transmitter station" of lines 2 and 3 was described in the instant disclosure as originally filed. Clarification is required.
- 4) It is not clear where the "remote cablecast transmitter station" of lines 2 and 3 was described in the instant disclosure as originally filed. Clarification was needed.

5) Claim 4 recites:

*"method of controlling the transmission of one of data and control signals by one of a remote broadcast and a remote cablecast transmitter station"*

It is not clear where this method was described in the instant disclosure as originally filed. Clarification is needed.

6) It is not clear where the "origination transmitter station" of lines 4 and 5 was described in the instant disclosure as originally filed. Clarification is needed.

7) Line 4 recites:

*"at least one receiver for receiving information from an origination station."*

It is not clear where such "receiver(s)" and where such received "information" were described in the instant disclosure as originally filed. Clarification is needed.



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8) It is not clear where the “information to be transmitted” of line 6 was described in the instant disclosure as originally filed clarification is needed.

9) It is not clear where the “at least one signal generator” of line 5 was described in the disclosure as originally filed. Clarification is needed.

10) It is not clear where the “cablecast information transmission” of line 7 was described in the instant disclosure as originally filed. Clarification is needed.

11) It is not clear where the “broadcast information transmission” of lines 6 and 7 was described in the instant disclosure as originally filed. Clarification is needed.

12) Lines 6 and 7 recite:

*“at least one transmitter for transmitting one of a broadcast and a cablecast information transmission.”*

It is not clear where such “transmitter(s)” were described in the instant disclosure as originally filed. Clarification is needed.

13) It is not clear where the communicated “information” of line 8 was described in the instant disclosure as originally filed. Clarification is needed.

14) It is not clear where the embedded “information” of line 9 was described in the instant disclosure as originally filed. Clarification is needed.

15) It is not clear where the “processor” of line 7, “for controlling at least one of the communication of information and the embedding of information at said signal generator”, was described in the instant disclosure as originally filed. Clarification is needed.

16) It is not clear where the “controller” of line 7, “for controlling at least one of the communication of information and the embedding of information at said signal generator”, was described in the instant disclosure as originally filed. Clarification is needed.

17) It is not clear where the “computer” of line 8, “for controlling at least one of the communication of information and the embedding of information at said signal generator”, was described in the instant disclosure as originally filed. Clarification is needed.

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18) It is not clear where the step of “receiving said information to be transmitted” of line 10, as it occurs in the context of claim 4, was described in the instant disclosure as originally filed. Clarification is needed.

19) It is not clear where the “second control signal” of line 15 was described in the instant disclosure as originally filed. Likewise, it is not clear where the “second control signal” of line 20 was described in the disclosure as originally filed. Clarification is needed.

20) It is not clear where the “second data” of line 15 was described in the instant disclosure as originally filed. Likewise, it is not clear where the “second data” of line 20 was described in the disclosure as originally filed. Clarification is needed.

21) It is not clear where the “first control signal” of line 14 was described in the instant disclosure as originally filed. Likewise, it is not clear where the “second control signal” of line 19 was described in the disclosure as originally filed. Clarification is needed.

22) It is not clear where the “first data” of line 14 was described in the instant disclosure as originally filed. Likewise, it is not clear where the “first data” of line 19 was described in the disclosure as originally filed. Clarification is needed.

23) It is not clear where the “instruct signal” of line 11 was described in the instant disclosure as originally filed, wherein said instruct signal was effective to perform **each** of the following positively recited operations:

- a) to cause “said transmitter station” to generate an instruct-to-embed signal that is itself effective at the broadcast transmitter station to cease embedding first data in a broadcast information transmission;
- b) to cause “said transmitter station” to generate an instruct-to-embed signal that is itself effective at the broadcast transmitter station to cease embedding a first control signal” in a broadcast information transmission;
- c) to cause “said transmitter station” to generate an instruct-to-embed signal that is itself effective at the broadcast transmitter station to embed second data in a broadcast information transmission;

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d) to cause "said transmitter station" to generate an instruct-to-embed signal that is itself effective at the broadcast transmitter station to embed a second control signal in a broadcast information transmission;

e) to cause "said transmitter station" to generate an instruct-to-embed signal that is itself effective at the broadcast transmitter station to cease embedding first data in a cablecast information transmission;

f) to cause "said transmitter station" to generate an instruct-to-embed signal that is itself effective at the broadcast transmitter station to cease embedding a first control signal" in a cablecast information transmission;

g) to cause "said transmitter station" to generate an instruct-to-embed signal that is itself effective at the broadcast transmitter station to embed second data in a cablecast information transmission;

h) to cause "said transmitter station" to generate an instruct-to-embed signal that is itself effective at the broadcast transmitter station to embed a second control signal in a cablecast information transmission;

I) to cause "said transmitter station" to generate an instruct-to-embed signal that is itself effective at the cablecast transmitter station to cease embedding first data in a broadcast information transmission;

j) to cause "said transmitter station" to generate an instruct-to-embed signal that is itself effective at the cablecast transmitter station to cease embedding a first control signal" in a broadcast information transmission;

k) to cause "said transmitter station" to generate an instruct-to-embed signal that is itself effective at the cablecast transmitter station to embed second data in a broadcast information transmission;

l) to cause "said transmitter station" to generate an instruct-to-embed signal that is itself effective at the cablecast transmitter station to embed a second control signal in a broadcast information transmission;

m) to cause "said transmitter station" to generate an instruct-to-embed signal that is itself effective at the cablecast transmitter station to cease embedding first data in a cablecast information transmission;

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n) to cause "said transmitter station" to generate an instruct-to-embed signal that is itself effective at the cablecast transmitter station to cease embedding a first control signal" in a cablecast information transmission;

o) to cause "said transmitter station" to generate an instruct-to-embed signal that is itself effective at the cablecast transmitter station to embed second data in a cablecast information transmission;

p) to cause "said transmitter station" to generate an instruct-to-embed signal that is itself effective at the cablecast transmitter station to embed a second control signal in a cablecast information transmission;

q) to cause "a receiver station" to generate an instruct-to-embed signal that was itself effective to cause the broadcast transmitter station to cease embedding first data in a broadcast information transmission;

r) to cause "a receiver station" to generate an instruct-to-embed signal that was itself effective to cause the broadcast transmitter station to cease embedding a first control signal" in a broadcast information transmission;

s) to cause "a receiver station" to generate an instruct-to-embed signal that was itself effective to cause the broadcast transmitter station to embed second data in a broadcast information transmission;

t) to cause "a receiver station" to generate an instruct-to-embed signal that was itself effective to cause the broadcast transmitter station to embed a second control signal in a broadcast information transmission;

u) to cause "a receiver station" to generate an instruct-to-embed signal that was itself effective to cause the broadcast transmitter station to cease embedding first data in a cablecast information transmission;

v) to cause "a receiver station" to generate an instruct-to-embed signal that was itself effective to cause the broadcast transmitter station to cease embedding a first control signal" in a cablecast information transmission;

w) to cause "a receiver station" to generate an instruct-to-embed signal that was itself effective to cause the broadcast transmitter station to embed second data in a cablecast information transmission;

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x) to cause “a receiver station” to generate an instruct-to-embed signal that was itself effective to cause the broadcast transmitter station to embed a second control signal in a cablecast information transmission.

y) to cause “a receiver station” to generate an instruct-to-embed signal that was itself effective to cause the cablecast transmitter station to cease embedding first data in a broadcast information transmission;

z) to cause “a receiver station” to generate an instruct-to-embed signal that was itself effective to cause the cablecast transmitter station to cease embedding a first control signal” in a broadcast information transmission;

aa) to cause “a receiver station” to generate an instruct-to-embed signal that was itself effective to cause the cablecast transmitter station to embed second data in a broadcast information transmission;

bb) to cause “a receiver station” to generate an instruct-to-embed signal that was itself effective to cause the cablecast transmitter station to embed a second control signal in a broadcast information transmission;

cc) to cause “a receiver station” to generate an instruct-to-embed signal that was itself effective to cause the cablecast transmitter station to cease embedding first data in a cablecast information transmission;

dd) to cause “a receiver station” to generate an instruct-to-embed signal that was itself effective to cause the cablecast transmitter station to cease embedding a first control signal” in a cablecast information transmission;

ee) to cause “a receiver station” to generate an instruct-to-embed signal that was itself effective to cause the cablecast transmitter station to embed second data in a cablecast information transmission; and

ff) to cause “a receiver station” to generate an instruct-to-embed signal that was itself effective to cause the cablecast transmitter station to embed a second control signal in a cablecast information transmission.

Clarification is required.

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24) It is not clear where the disclosure as originally filed disclosed the step of “receiving an instruct signal” as recited in line 11, wherein this received instruct signal was effective:

- a) to cause “said transmitter station” to generate an instruct-to-embed signal that is itself effective at the broadcast transmitter station to cease embedding first data in a broadcast information transmission;
- b) to cause “said transmitter station” to generate an instruct-to-embed signal that is itself effective at the broadcast transmitter station to cease embedding a first control signal” in a broadcast information transmission;
- c) to cause “said transmitter station” to generate an instruct-to-embed signal that is itself effective at the broadcast transmitter station to embed second data in a broadcast information transmission;
- d) to cause “said transmitter station” to generate an instruct-to-embed signal that is itself effective at the broadcast transmitter station to embed a second control signal in a broadcast information transmission;
- e) to cause “said transmitter station” to generate an instruct-to-embed signal that is itself effective at the broadcast transmitter station to cease embedding first data in a cablecast information transmission;
- f) to cause “said transmitter station” to generate an instruct-to-embed signal that is itself effective at the broadcast transmitter station to cease embedding a first control signal” in a cablecast information transmission;
- g) to cause “said transmitter station” to generate an instruct-to-embed signal that is itself effective at the broadcast transmitter station to embed second data in a cablecast information transmission;
- h) to cause “said transmitter station” to generate an instruct-to-embed signal that is itself effective at the broadcast transmitter station to embed a second control signal in a cablecast information transmission;
- I) to cause “said transmitter station” to generate an instruct-to-embed signal that is itself effective at the cablecast transmitter station to cease embedding first data in a broadcast information transmission;

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j) to cause “said transmitter station” to generate an instruct-to-embed signal that is itself effective at the cablecast transmitter station to cease embedding a first control signal” in a broadcast information transmission;

k) to cause “said transmitter station” to generate an instruct-to-embed signal that is itself effective at the cablecast transmitter station to embed second data in a broadcast information transmission;

l) to cause “said transmitter station” to generate an instruct-to-embed signal that is itself effective at the cablecast transmitter station to embed a second control signal in a broadcast information transmission;

m) to cause “said transmitter station” to generate an instruct-to-embed signal that is itself effective at the cablecast transmitter station to cease embedding first data in a cablecast information transmission;

n) to cause “said transmitter station” to generate an instruct-to-embed signal that is itself effective at the cablecast transmitter station to cease embedding a first control signal” in a cablecast information transmission;

o) to cause “said transmitter station” to generate an instruct-to-embed signal that is itself effective at the cablecast transmitter station to embed second data in a cablecast information transmission;

p) to cause “said transmitter station” to generate an instruct-to-embed signal that is itself effective at the cablecast transmitter station to embed a second control signal in a cablecast information transmission;

q) to cause “a receiver station” to generate an instruct-to-embed signal that was itself effective to cause the broadcast transmitter station to cease embedding first data in a broadcast information transmission;

r) to cause “a receiver station” to generate an instruct-to-embed signal that was itself effective to cause the broadcast transmitter station to cease embedding a first control signal” in a broadcast information transmission;

s) to cause “a receiver station” to generate an instruct-to-embed signal that was itself effective to cause the broadcast transmitter station to embed second data in a broadcast information transmission;

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- t) to cause “a receiver station” to generate an instruct-to-embed signal that was itself effective to cause the broadcast transmitter station to embed a second control signal in a broadcast information transmission;
- u) to cause “a receiver station” to generate an instruct-to-embed signal that was itself effective to cause the broadcast transmitter station to cease embedding first data in a cablecast information transmission;
- v) to cause “a receiver station” to generate an instruct-to-embed signal that was itself effective to cause the broadcast transmitter station to cease embedding a first control signal” in a cablecast information transmission;
- w) to cause “a receiver station” to generate an instruct-to-embed signal that was itself effective to cause the broadcast transmitter station to embed second data in a cablecast information transmission;
- x) to cause “a receiver station” to generate an instruct-to-embed signal that was itself effective to cause the broadcast transmitter station to embed a second control signal in a cablecast information transmission.
- y) to cause “a receiver station” to generate an instruct-to-embed signal that was itself effective to cause the cablecast transmitter station to cease embedding first data in a broadcast information transmission;
- z) to cause “a receiver station” to generate an instruct-to-embed signal that was itself effective to cause the cablecast transmitter station to cease embedding a first control signal” in a broadcast information transmission;
- aa) to cause “a receiver station” to generate an instruct-to-embed signal that was itself effective to cause the cablecast transmitter station to embed second data in a broadcast information transmission;
- bb) to cause “a receiver station” to generate an instruct-to-embed signal that was itself effective to cause the cablecast transmitter station to embed a second control signal in a broadcast information transmission;
- cc) to cause “a receiver station” to generate an instruct-to-embed signal that was itself effective to cause the cablecast transmitter station to cease embedding first data in a cablecast information transmission;



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dd) to cause “a receiver station” to generate an instruct-to-embed signal that was itself effective to cause the cablecast transmitter station to cease embedding a first control signal” in a cablecast information transmission;

ee) to cause “a receiver station” to generate an instruct-to-embed signal that was itself effective to cause the cablecast transmitter station to embed second data in a cablecast information transmission; and

ff) to cause “a receiver station” to generate an instruct-to-embed signal that was itself effective to cause the cablecast transmitter station to embed a second control signal in a cablecast information transmission.

Clarification is required.

25) It is not clear where the “instruct-to-embed signal” of lines 12 and 13, e.g. that which was generated by “said transmitter station”, was described in the instant disclosure as originally filed. Clarification is needed.

26) It is not clear where the “instruct-to-embed signal” of lines 17 and 18, e.g. that which was generated by the “receiver station”, was described in the instant disclosure as originally filed. Clarification is needed.

27) It is not clear where the instant disclosure as originally filed described the step for “receiving a transmitter control signal” that is now recited in lines 22-24 wherein said received transmitter control signal operated at “said transmitter station” to communicate “said instruct-to-embed signal” to at least one transmitter at “said transmitter station”, and wherein said communicated instruct-to-embed signal was:

a) generated at “said transmitter station” and was itself effective at the broadcast transmitter station to cease embedding first data in a broadcast information transmission;

b) generated at “said transmitter station” and was itself effective at the broadcast transmitter station to cease embedding a first control signal” in a broadcast information transmission;

c) generated at “said transmitter station” and was itself effective at the broadcast transmitter station to embed second data in a broadcast information transmission;

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d) generated at “said transmitter station” and was itself effective at the broadcast transmitter station to embed a second control signal in a broadcast information transmission;

e) generated at “said transmitter station” and was itself effective at the broadcast transmitter station to cease embedding first data in a cablecast information transmission;

f) generated at “said transmitter station” and was itself effective at the broadcast transmitter station to cease embedding a first control signal” in a cablecast information transmission;

g) generated at “said transmitter station” and was itself effective at the broadcast transmitter station to embed second data in a cablecast information transmission;

h) generated at “said transmitter station” and was itself effective at the broadcast transmitter station to embed a second control signal in a cablecast information transmission;

I) generated at “said transmitter station” and was itself effective at the cablecast transmitter station to cease embedding first data in a broadcast information transmission;

j) generated at “said transmitter station” and was itself effective at the cablecast transmitter station to cease embedding a first control signal” in a broadcast information transmission;

k) generated at “said transmitter station” and was itself effective at the cablecast transmitter station to embed second data in a broadcast information transmission;

l) generated at “said transmitter station” and was itself effective at the cablecast transmitter station to embed a second control signal in a broadcast information transmission;

m) generated at “said transmitter station” and was itself effective at the cablecast transmitter station to cease embedding first data in a cablecast information transmission;

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- n) generated at “said transmitter station” and was itself effective at the cablecast transmitter station to cease embedding a first control signal” in a cablecast information transmission;
- o) generated at “said transmitter station” and was itself effective at the cablecast transmitter station to embed second data in a cablecast information transmission;
- p) generated at “said transmitter station” and was itself effective at the cablecast transmitter station to embed a second control signal in a cablecast information transmission;
- q) generated at “a receiver station” and was itself effective to cause the broadcast transmitter station to cease embedding first data in a broadcast information transmission;
- r) generated at “a receiver station” and was itself effective to cause the broadcast transmitter station to cease embedding a first control signal” in a broadcast information transmission;
- s) generated at “a receiver station” and was itself effective to cause the broadcast transmitter station to embed second data in a broadcast information transmission;
- t) generated at “a receiver station” and was itself effective to cause the broadcast transmitter station to embed a second control signal in a broadcast information transmission;
- u) generated at “a receiver station” and was itself effective to cause the broadcast transmitter station to cease embedding first data in a cablecast information transmission;
- v) generated at “a receiver station” and was itself effective to cause the broadcast transmitter station to cease embedding a first control signal” in a cablecast information transmission;
- w) generated at “a receiver station” and was itself effective to cause the broadcast transmitter station to embed second data in a cablecast information transmission;

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x) generated at “a receiver station” and was itself effective to cause the broadcast transmitter station to embed a second control signal in a cablecast information transmission.

y) generated at “a receiver station” and was itself effective to cause the cablecast transmitter station to cease embedding first data in a broadcast information transmission;

z) generated at “a receiver station” and was itself effective to cause the cablecast transmitter station to cease embedding a first control signal” in a broadcast information transmission;

aa) generated at “a receiver station” and was itself effective to cause the cablecast transmitter station to embed second data in a broadcast information transmission;

bb) generated at “a receiver station” and was itself effective to cause the cablecast transmitter station to embed a second control signal in a broadcast information transmission;

cc) generated at “a receiver station” and was itself effective to cause the cablecast transmitter station to cease embedding first data in a cablecast information transmission;

dd) generated at “a receiver station” and was itself effective to cause the cablecast transmitter station to cease embedding a first control signal” in a cablecast information transmission;

ee) generated at “a receiver station” and was itself effective to cause the cablecast transmitter station to embed second data in a cablecast information transmission; and

ff) generated at “a receiver station” and was effective to cause the cablecast transmitter station to embed a second control signal in a cablecast information transmission.

Clarification is required.

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28) It is not clear where the originally filed instant disclosure described the step of “transmitting” that is now recited in lines 24 and 25 in which:

a) “said broadcast information transmission” was transmitted;

b) “said transmitter control signal” was transmitted; and

c) “said instruct-to-embed signal” was transmitted, wherein this transmitted “instruct-to-embed signal” was:

1. generated at “said transmitter station” and was itself effective at the broadcast transmitter station to cease embedding first data in a broadcast information transmission;

2. generated at “said transmitter station” and was itself effective at the broadcast transmitter station to cease embedding a first control signal” in a broadcast information transmission;

3. generated at “said transmitter station” and was itself effective at the broadcast transmitter station to embed second data in a broadcast information transmission;

4. generated at “said transmitter station” and was itself effective at the broadcast transmitter station to embed a second control signal in a broadcast information transmission;

5. generated at “said transmitter station” and was itself effective at the broadcast transmitter station to cease embedding first data in a cablecast information transmission;

6. generated at “said transmitter station” and was itself effective at the broadcast transmitter station to cease embedding a first control signal” in a cablecast information transmission;

7. generated at “said transmitter station” and was itself effective at the broadcast transmitter station to embed second data in a cablecast information transmission;

8. generated at “said transmitter station” and was itself effective at the broadcast transmitter station to embed a second control signal in a cablecast information transmission;

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9. generated at "said transmitter station" and was itself effective at the cablecast transmitter station to cease embedding first data in a broadcast information transmission;
10. generated at "said transmitter station" and was itself effective at the cablecast transmitter station to cease embedding a first control signal" in a broadcast information transmission;
11. generated at "said transmitter station" and was itself effective at the cablecast transmitter station to embed second data in a broadcast information transmission;
12. generated at "said transmitter station" and was itself effective at the cablecast transmitter station to embed a second control signal in a broadcast information transmission;
13. generated at "said transmitter station" and was itself effective at the cablecast transmitter station to cease embedding first data in a cablecast information transmission;
14. generated at "said transmitter station" and was itself effective at the cablecast transmitter station to cease embedding a first control signal" in a cablecast information transmission;
15. generated at "said transmitter station" and was itself effective at the cablecast transmitter station to embed second data in a cablecast information transmission;
16. generated at "said transmitter station" and was itself effective at the cablecast transmitter station to embed a second control signal in a cablecast information transmission;
17. generated at "a receiver station" and was itself effective to cause the broadcast transmitter station to cease embedding first data in a broadcast information transmission;
18. generated at "a receiver station" and was itself effective to cause the broadcast transmitter station to cease embedding a first control signal" in a broadcast information transmission;

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19. generated at “a receiver station” and was itself effective to cause the broadcast transmitter station to embed second data in a broadcast information transmission;

20. generated at “a receiver station” and was itself effective to cause the broadcast transmitter station to embed a second control signal in a broadcast information transmission;

21. generated at “a receiver station” and was itself effective to cause the broadcast transmitter station to cease embedding first data in a cablecast information transmission;

22. generated at “a receiver station” and was itself effective to cause the broadcast transmitter station to cease embedding a first control signal” in a cablecast information transmission;

23. generated at “a receiver station” and was itself effective to cause the broadcast transmitter station to embed second data in a cablecast information transmission;

24. generated at “a receiver station” and was itself effective to cause the broadcast transmitter station to embed a second control signal in a cablecast information transmission.

25. generated at “a receiver station” and was itself effective to cause the cablecast transmitter station to cease embedding first data in a broadcast information transmission;

26. generated at “a receiver station” and was itself effective to cause the cablecast transmitter station to cease embedding a first control signal” in a broadcast information transmission;

27. generated at “a receiver station” and was itself effective to cause the cablecast transmitter station to embed second data in a broadcast information transmission;

28. generated at “a receiver station” and was itself effective to cause the cablecast transmitter station to embed a second control signal in a broadcast information transmission;

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29. generated at “a receiver station” and was itself effective to cause the cablecast transmitter station to cease embedding first data in a cablecast information transmission;

30. generated at “a receiver station” and was itself effective to cause the cablecast transmitter station to cease embedding a first control signal” in a cablecast information transmission;

31. generated at “a receiver station” and was itself effective to cause the cablecast transmitter station to embed second data in a cablecast information transmission; and

32. generated at “a receiver station” and was effective to cause the cablecast transmitter station to embed a second control signal in a cablecast information transmission.

Clarification is required.

29) It is not clear where the originally filed instant disclosure described the step of “transmitting” that is now recited in lines 24 and 25 in which:

a) “said cablecast information transmission” was transmitted;

b) “said transmitter control signal” was transmitted; and

c) “said instruct-to-embed signal” was transmitted, wherein this transmitted “instruct-to-embed signal” was:

1. generated at “said transmitter station” and was itself effective at the broadcast transmitter station to cease embedding first data in a broadcast information transmission;

2. generated at “said transmitter station” and was itself effective at the broadcast transmitter station to cease embedding a first control signal” in a broadcast information transmission;

3. generated at “said transmitter station” and was itself effective at the broadcast transmitter station to embed second data in a broadcast information transmission;



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4. generated at "said transmitter station" and was itself effective at the broadcast transmitter station to embed a second control signal in a broadcast information transmission;
5. generated at "said transmitter station" and was itself effective at the broadcast transmitter station to cease embedding first data in a cablecast information transmission;
6. generated at "said transmitter station" and was itself effective at the broadcast transmitter station to cease embedding a first control signal" in a cablecast information transmission;
7. generated at "said transmitter station" and was itself effective at the broadcast transmitter station to embed second data in a cablecast information transmission;
8. generated at "said transmitter station" and was itself effective at the broadcast transmitter station to embed a second control signal in a cablecast information transmission;
9. generated at "said transmitter station" and was itself effective at the cablecast transmitter station to cease embedding first data in a broadcast information transmission;
10. generated at "said transmitter station" and was itself effective at the cablecast transmitter station to cease embedding a first control signal" in a broadcast information transmission;
11. generated at "said transmitter station" and was itself effective at the cablecast transmitter station to embed second data in a broadcast information transmission;
12. generated at "said transmitter station" and was itself effective at the cablecast transmitter station to embed a second control signal in a broadcast information transmission;
13. generated at "said transmitter station" and was itself effective at the cablecast transmitter station to cease embedding first data in a cablecast information transmission;

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14. generated at “said transmitter station” and was itself effective at the cablecast transmitter station to cease embedding a first control signal” in a cablecast information transmission;
15. generated at “said transmitter station” and was itself effective at the cablecast transmitter station to embed second data in a cablecast information transmission;
16. generated at “said transmitter station” and was itself effective at the cablecast transmitter station to embed a second control signal in a cablecast information transmission;
17. generated at “a receiver station” and was itself effective to cause the broadcast transmitter station to cease embedding first data in a broadcast information transmission;
18. generated at “a receiver station” and was itself effective to cause the broadcast transmitter station to cease embedding a first control signal” in a broadcast information transmission;
19. generated at “a receiver station” and was itself effective to cause the broadcast transmitter station to embed second data in a broadcast information transmission;
20. generated at “a receiver station” and was itself effective to cause the broadcast transmitter station to embed a second control signal in a broadcast information transmission;
21. generated at “a receiver station” and was itself effective to cause the broadcast transmitter station to cease embedding first data in a cablecast information transmission;
22. generated at “a receiver station” and was itself effective to cause the broadcast transmitter station to cease embedding a first control signal” in a cablecast information transmission;
23. generated at “a receiver station” and was itself effective to cause the broadcast transmitter station to embed second data in a cablecast information transmission;

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24. generated at “a receiver station” and was itself effective to cause the broadcast transmitter station to embed a second control signal in a cablecast information transmission.

25. generated at “a receiver station” and was itself effective to cause the cablecast transmitter station to cease embedding first data in a broadcast information transmission;

26. generated at “a receiver station” and was itself effective to cause the cablecast transmitter station to cease embedding a first control signal” in a broadcast information transmission;

27. generated at “a receiver station” and was itself effective to cause the cablecast transmitter station to embed second data in a broadcast information transmission;

28. generated at “a receiver station” and was itself effective to cause the cablecast transmitter station to embed a second control signal in a broadcast information transmission;

29. generated at “a receiver station” and was itself effective to cause the cablecast transmitter station to cease embedding first data in a cablecast information transmission;

30. generated at “a receiver station” and was itself effective to cause the cablecast transmitter station to cease embedding a first control signal” in a cablecast information transmission;

31. generated at “a receiver station” and was itself effective to cause the cablecast transmitter station to embed second data in a cablecast information transmission; and

32. generated at “a receiver station” and was effective to cause the cablecast transmitter station to embed a second control signal in a cablecast information transmission.

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**IV. With respect to that which is now recited in claim 2:**

- 1) It is not clear where the instant disclosure as originally filed described the “data” that is now being recited in line 2. Clarification is needed.
- 2) It is not clear where the instant disclosure as originally filed described the “control signals” that now being recited in line 2. Clarification is needed.
- 3) It is not clear where the instant disclosure as originally filed described the “broadcast transmitter station” that is now being recited in line 2. Clarification is needed.
- 4) It is not clear where the instant disclosure as originally filed described the “cablecast transmitter station” that is now being recited in line 2. Clarification is needed.
- 5) It is not clear where the instant disclosure as originally filed described the recited “**broadcast** transmitter station” of line 2 which comprised: a) at least one signal generator; b) at least one transmitter; and c) a **processor** [note lines 1-7]. Clarification is needed.
- 6) It is not clear where the instant disclosure as originally filed described the recited “**broadcast** transmitter station” of line 2 which comprised: a) at least one signal generator; b) at least one transmitter; and c) a **computer** [note lines 1-7]. Clarification is needed.
- 7) It is not clear where the instant disclosure as originally filed described the recited “**broadcast** transmitter station” of line 2 which comprised: a) at least one signal generator; b) at least one transmitter; and c) a **controller** [note lines 1-7]. Clarification is needed.
- 8) It is not clear where the instant disclosure as originally filed described the recited “**cablecast** transmitter station” of line 2 which comprised: a) at least one signal generator; b) at least one transmitter; and c) a **processor** [note lines 1-7]. Clarification is needed.
- 9) It is not clear where the instant disclosure as originally filed described the recited “**cablecast** transmitter station” of line 2 which comprised: a) at least one

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signal generator; b) at least one transmitter; and c) a **computer** [note lines 1-7]. Clarification is needed.

10) It is not clear where the instant disclosure as originally filed described the recited “**cablecast** transmitter station” of line 2 which comprised: a) at least one signal generator; b) at least one transmitter; and c) a **controller** [note lines 1-7]. Clarification is needed

11) It is not clear where the instant disclosure as originally filed described the recited “unit of data” of line 3. Clarification is needed.

12) It is not clear where the instant disclosure as originally filed described the recited “information transmission” of line 4. Clarification is needed.

13) It is not clear where the instant disclosure as originally filed described the recited “broadcast information transmission” of lines 4 and 5. Clarification is needed.

14) It is not clear where the instant disclosure as originally filed described the recited “cablecast information transmission” of lines 4 and 5. Clarification is needed.

13) It is not clear where the instant disclosure as originally filed described the recited “information” 7. Clarification is needed.

14) In lines 6 and 7, the recitation of “the embedding of information at said signal generator” has no clear antecedent basis and is confusing when referred back to the recitations of lines 3 and 4 which appear to recite that said signal generator is “for embedding a unit of data in an information transmission”. Thus it is not clear how the “information” that is being embedded in line 7 relates back to the “unit of data” and the “information transmission” of lines 3 and 4. Clarification is needed.

14) It is not clear where the instant disclosure as originally filed described the recited “instruct-to-embed signal” of line 13. Clarification is needed.

15) It is not clear where the instant disclosure as originally filed described the recited step of “receiving” said “instruct-to-embed signal” from “one remote transmitter station” as is required to support the recitations of line 13. Clarification is needed.

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16) It is not clear where the instant disclosure as originally filed described the recited step of “receiving” said “instruct-to-embed signal” from “more than said” one remote transmitter station as is required to support the “at least one” recitation of line 13. Clarification is needed.

17) With respect to lines 15 and 16, it is not clear where applicant’s originally filed disclosure described steps for:

A) “causing” the “signal generator” at a “**broadcast** transmitter station” to “cease embedding” at least “**first data**” in response to said “instruct-to-embed signal” which was provided by only “**one** remote transmitter station”;

B) “causing” the “signal generator” at a “**broadcast** transmitter station” to “cease embedding” at least “**first data**” in response to said “instruct-to-embed signal” which was provided by “**more than said**” one remote transmitter station;

C) “causing” the “signal generator” at a “**broadcast** transmitter station” to “cease embedding” at least a “**first control signal**” in response to said “instruct-to-embed signal” which was provided by only “**one** remote transmitter station”;

D) “causing” the “signal generator” at a “**broadcast** transmitter station” to “cease embedding” at least a “**first control signal**” in response to said “instruct-to-embed signal” which was provided by “**more than said**” one remote transmitter station;

E) “causing” the “signal generator” at a “**cablecast** transmitter station” to “cease embedding” at least “**first data**” in response to said “instruct-to-embed signal” which was provided by only “**one** remote transmitter station”;

F) “causing” the “signal generator” at a “**cablecast** transmitter station” to “cease embedding” at least “**first data**” in response to said “instruct-to-embed signal” which was provided by “**more than said**” one remote transmitter station;

G) “causing” the “signal generator” at a “**cablecast** transmitter station” to “cease embedding” at least a “**first control signal**” in response to said

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“instruct-to-embed signal” which was provided by only **“one remote transmitter station”**;

H) “causing” the “signal generator” at a **“cablecast transmitter station”** to “cease embedding” at least a **“first control signal”** in response to said “instruct-to-embed signal” which was provided by **“more than said”** one remote transmitter station.

Clarification is needed.

18) With respect to lines 17 and 18, it is not clear where applicant’s originally filed disclosure described steps for:

A) “causing” the “signal generator” at a **“broadcast transmitter station”** to “embed” at least **“second data”** in response to said “instruct-to-embed signal” which was provided by only **“one remote transmitter station”**;

B) “causing” the “signal generator” at a **“broadcast transmitter station”** to “embed” at least **“second data”** in response to said “instruct-to-embed signal” which was provided by **“more than said”** one remote transmitter station;

C) “causing” the “signal generator” at a **“broadcast transmitter station”** to “embed” at least a **“second control signal”** in response to said “instruct-to-embed signal” which was provided by only **“one remote transmitter station”**;

D) “causing” the “signal generator” at a **“broadcast transmitter station”** to “embed” at least a **“second control signal”** in response to said “instruct-to-embed signal” which was provided by **“more than said”** one remote transmitter station;

E) “causing” the “signal generator” at a **“cablecast transmitter station”** to “embed” at least **“second data”** in response to said “instruct-to-embed signal” which was provided by only **“one remote transmitter station”**;

F) “causing” the “signal generator” at a **“cablecast transmitter station”** to “embed” at least **“second data”** in response to said “instruct-to-embed signal” which was provided by **“more than said”** one remote transmitter station;

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G) "causing" the "signal generator" at a "**cablecast** transmitter station" to "embed" at least a "**second control signal**" in response to said "instruct-to-embed signal" which was provided by only "**one** remote transmitter station";

H) "causing" the "signal generator" at a "**cablecast** transmitter station" to "embed" at least a "**second control signal**" in response to said "instruct-to-embed signal" which was provided by "**more than said**" one remote transmitter station.

Calrification is needed.

19) In line 10, it is not clear where the instant disclosure as originally filed described the recited step of:

"communicating said information transmission to said transmitter."

Clarification is needed.

**V. With respect to that which is now recited in claim 3:**

1) With respect to lines 1-3, it is not clear where the instant disclosure as originally filed described:

A) The recited "method" of controlling the transmission of the recited "**data**" by the recited "remote **broadcast** transmitter station";

B) The recited "method" of controlling the transmission of the recited "**data**" by the recited "remote **cablecast** transmitter station";

C) The recited "method" of controlling the transmission of the recited "**control signals**" by the recited "remote **broadcast** transmitter station";

D) The recited "method" of controlling the transmission of the recited "**control signals**" by the recited "remote **cablecast** transmitter station."

Clarification is needed.



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2) With respect to lines 3-5, it is not clear where the instant disclosure disclosed:

A) the “**origination transmitter station**” of line 5 which provided a “**broadcast** information transmission” to only “**one receiver**” which was located at a “remote **broadcast** transmitter station”;

B) the “**origination transmitter station**” of line 5 which provided a “**broadcast** information transmission” to “**more than**” said “**one receiver**” which were located at a “remote **broadcast** transmitter station”;

C) the “**origination transmitter station**” of line 5 which provided a “**cablecast** information transmission” to only “**one receiver**” which was located at a “remote **cablecast** transmitter station”;

D) the “**origination transmitter station**” of line 5 which provided a “**cablecast** information transmission” to “**more than**” said “**one receiver**” which were located at a “remote **cablecast** transmitter station”;

E) the “**origination transmitter station**” of line 5 which provided a “**cablecast** information transmission” to only “**one receiver**” which was located at a “remote **broadcast** transmitter station”;

F) the “**origination transmitter station**” of line 5 which provided a “**cablecast** information transmission” to “**more than**” said “**one receiver**” which were located at a “remote **broadcast** transmitter station”;

G) the “**origination transmitter station**” of line 5 which provided a “**broadcast** information transmission” to only “**one receiver**” which was located at a “remote **cablecast** transmitter station”;

H) the “**origination transmitter station**” of line 5 which provided a “**broadcast** information transmission” to “**more than**” said “**one receiver**” which were located at a “remote **cablecast** transmitter station.”

Clarification is needed.

3) With respect to lines 1-11, it is not clear where the instant disclosure as originally filed described:

A) the recited “remote **broadcast** transmitter station” of lines 2 and 3 which comprised:

1. “at least one (e.g. one and more than one) receiver”;

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2. "at least one (e.g. one and more that one) transmitter";
3. "at least one (e.g. one and more that one) signal generator"; and
4. a "**processor**" for controlling:
  - a. the communication of a **broadcast** information transmission to said "*at least one(?)*" signal generator;

B) the recited "remote **broadcast** transmitter station" of lines 2 and 3 which comprised:

1. "at least one (e.g. one and more that one) receiver";
2. "at least one (e.g. one and more that one) transmitter";
3. "at least one (e.g. one and more that one) signal generator"; and
4. a "**processor**" for controlling:
  - a. the embedding of information at said "*at least one(?)*" signal generator;

C) the recited "remote **broadcast** transmitter station" of lines 2 and 3 which comprised:

1. "at least one (e.g. one and more that one) receiver";
2. "at least one (e.g. one and more that one) transmitter";
3. "at least one (e.g. one and more that one) signal generator"; and
4. a "**processor**" for controlling both:
  - a. the communication of a **broadcast** information transmission to said "*at least one(?)*" signal generator; and
  - b. the embedding of information at said "*at least one(?)*" signal generator;

D) the recited "remote **broadcast** transmitter station" of lines 2 and 3 which comprised:

1. "at least one (e.g. one and more that one) receiver";
2. "at least one (e.g. one and more that one) transmitter";
3. "at least one (e.g. one and more that one) signal generator"; and
4. a "**controller**" for controlling:
  - a. the communication of a **broadcast** information transmission to said "*at least one(?)*" signal generator;

E) the recited "remote **broadcast** transmitter station" of lines 2 and 3 which comprised:

1. "at least one (e.g. one and more that one) receiver";
2. "at least one (e.g. one and more that one) transmitter";

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3. "at least one (e.g. one and more that one) signal generator"; and
4. a "**controller**" for controlling:
  - a. the embedding of information at said "*at least one(?)*" signal generator;

F) the recited "remote **broadcast** transmitter station" of lines 2 and 3 which comprised:

1. "at least one (e.g. one and more that one) receiver";
2. "at least one (e.g. one and more that one) transmitter";
3. "at least one (e.g. one and more that one) signal generator"; and
4. a "**controller**" for controlling both:
  - a. the communication of a **broadcast** information transmission to said "*at least one(?)*" signal generator; and
  - b. the embedding of information at said "*at least one(?)*" signal generator;

G) the recited "remote **broadcast** transmitter station" of lines 2 and 3 which comprised:

1. "at least one (e.g. one and more that one) receiver";
2. "at least one (e.g. one and more that one) transmitter";
3. "at least one (e.g. one and more that one) signal generator"; and
4. a "**computer**" for controlling:
  - a. the communication of a **broadcast** information transmission to said "*at least one(?)*" signal generator;

H) the recited "remote **broadcast** transmitter station" of lines 2 and 3 which comprised:

1. "at least one (e.g. one and more that one) receiver";
2. "at least one (e.g. one and more that one) transmitter";
3. "at least one (e.g. one and more that one) signal generator"; and
4. a "**computer**" for controlling:
  - a. the embedding of information at said "*at least one(?)*" signal generator;

I) the recited "remote **broadcast** transmitter station" of lines 2 and 3 which comprised:

1. "at least one (e.g. one and more that one) receiver";
2. "at least one (e.g. one and more that one) transmitter";
3. "at least one (e.g. one and more that one) signal generator"; and

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4. a “**computer**” for controlling both:
  - a. the communication of a **broadcast** information transmission to said “*at least one(?)*” signal generator; and
  - b. the embedding of information at said “*at least one(?)*” signal generator;

J) the recited “remote **cablecast** transmitter station” of lines 2 and 3 which comprised:

1. “at least one (e.g. one and more that one) receiver”;
2. “at least one (e.g. one and more that one) transmitter”;
3. “at least one (e.g. one and more that one) signal generator”; and
4. a “**processor**” for controlling:
  - a. the communication of a **cablecast** information transmission to said “*at least one(?)*” signal generator;

K) the recited “remote **cablecast** transmitter station” of lines 2 and 3 which comprised:

1. “at least one (e.g. one and more that one) receiver”;
2. “at least one (e.g. one and more that one) transmitter”;
3. “at least one (e.g. one and more that one) signal generator”; and
4. a “**processor**” for controlling:
  - a. the embedding of information at said “*at least one(?)*” signal generator;

L) the recited “remote **cablecast** transmitter station” of lines 2 and 3 which comprised:

1. “at least one (e.g. one and more that one) receiver”;
2. “at least one (e.g. one and more that one) transmitter”;
3. “at least one (e.g. one and more that one) signal generator”; and
4. a “**processor**” for controlling both:
  - a. the communication of a **cablecast** information transmission to said “*at least one(?)*” signal generator; and
  - b. the embedding of information at said “*at least one(?)*” signal generator;

M) the recited “remote **cablecast** transmitter station” of lines 2 and 3 which comprised:

1. “at least one (e.g. one and more that one) receiver”;
2. “at least one (e.g. one and more that one) transmitter”;

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3. "at least one (e.g. one and more that one) signal generator"; and
4. a "**controller**" for controlling:
  - a. the communication of a **cablecast** information transmission to said "*at least one(?)*" signal generator;

N) the recited "remote **cablecast** transmitter station" of lines 2 and 3 which comprised:

1. "at least one (e.g. one and more that one) receiver";
2. "at least one (e.g. one and more that one) transmitter";
3. "at least one (e.g. one and more that one) signal generator"; and
4. a "**controller**" for controlling:
  - a. the embedding of information at said "*at least one(?)*" signal generator;

O) the recited "remote **cablecast** transmitter station" of lines 2 and 3 which comprised:

1. "at least one (e.g. one and more that one) receiver";
2. "at least one (e.g. one and more that one) transmitter";
3. "at least one (e.g. one and more that one) signal generator"; and
4. a "**controller**" for controlling both:
  - a. the communication of a **cablecast** information transmission to said "*at least one(?)*" signal generator; and
  - b. the embedding of information at said "*at least one(?)*" signal generator;

P) the recited "remote **cablecast** transmitter station" of lines 2 and 3 which comprised:

1. "at least one (e.g. one and more that one) receiver";
2. "at least one (e.g. one and more that one) transmitter";
3. "at least one (e.g. one and more that one) signal generator"; and
4. a "**computer**" for controlling:
  - a. the communication of a **cablecast** information transmission to said "*at least one(?)*" signal generator;

Q) the recited "remote **cablecast** transmitter station" of lines 2 and 3 which comprised:

1. "at least one (e.g. one and more that one) receiver";
2. "at least one (e.g. one and more that one) transmitter";
3. "at least one (e.g. one and more that one) signal generator"; and

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4. a “**computer**” for controlling:
  - a. the embedding of information at said “*at least one(?)*” signal generator;

R) the recited “remote **cablecast** transmitter station” of lines 2 and 3 which comprised:

1. “at least one (e.g. one and more that one) receiver”;
2. “at least one (e.g. one and more that one) transmitter”;
3. “at least one (e.g. one and more that one) signal generator”; and
4. a “**computer**” for controlling both:
  - a. the communication of a **cablecast** information transmission to said “*at least one(?)*” signal generator; and
  - b. the embedding of information at said “*at least one(?)*” signal generator.

4) With respect to lines 12 and 13, it is not clear where the instant disclosure as originally filed described the recited step of “**receiving**” a “**broadcast** information transmission” at “said origination transmitter station.” Clarification is needed.

5) With respect to lines 12 and 13, it is not clear where the instant disclosure as originally filed described the recited step of “**receiving**” a “**cablecast** information transmission” at “said origination transmitter station.” Clarification is needed.

6) With respect to lines 14-17, it is not clear where the instant disclosure as originally filed described the recited step of “**generating an instruct-to-embed signal**” which was effective:

- A) to cause the “**broadcast** transmitter station” to “**cease**” embedding “**first data**”;
- B) to cause the “**broadcast** transmitter station” to “**cease**” embedding a “**first control signal**”;
- C) to cause the “**broadcast** transmitter station” to “**embed**” the recited “**second data**”;
- D) to cause the “**broadcast** transmitter station” to “**embed**” the recited “**second control signal**”;

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E) to cause the “**cablecast** transmitter station” to “**cease**” embedding “**first data**”;

F) to cause the “**cablecast** transmitter station” to “**cease**” embedding a “**first control signal**”;

G) to cause the “**cablecast** transmitter station” to “**embed**” the recited “**second data**”;

H) to cause the “**cablecast** transmitter station” to “**embed**” the recited “**second control signal**.”

Clarification is needed.

7) With respect to lines 18 and 19, it is not clear where the instant disclosure as originally filed described the recited step for “**transmitting**” the recited “**broadcast** information transmission” and the recited “**instruct-to-embed signal**.” Clarification is needed.

8) With respect to lines 18 and 19, it is not clear where the instant disclosure as originally filed described the recited step for “**transmitting**” the recited “**cablecast** information transmission” and the recited “**instruct-to-embed signal**.” Clarification is needed.

**VI. With respect to that which is now recited in claim 6-11 and 13-39:**

1) The examiner maintains that it is unclear where the subject matter that is now being claimed in claims 6-11 and 13-39 was described within the instant disclosure as originally filed; e.g. particularly when one attempts to read the limitations of these claims in the context of claims 1-5 from which they depend [see parts I-V of this paragraph]. Clarification is needed.

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#### **SECTION IV:** (section 103)

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).



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**1) Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Oberlies [DE 3,527,939].**

**I. The showing of Oberlies:**

Oberlies discloses a transmitting system of figure 1. The system comprises:

A) A TV studio (101) for outputting a composite TV signal that contains embedded digital data representing:

- 1) embedded pages of a conventional Videotext/Teletext data service; and
- 2) embedded *VPS*<sup>37</sup> coding (e.g. a TV programming label/tag) that can be used to identify the current TV program being outputted from the studio (101) at any given instant in time;

B) A signal processing arrangement (102-108) which comprised:

- 1) VPS decoding circuitry (103) for detecting and extracting the embedded VPS codes from the TV signal that is outputted by the studio;
- 2) Videotext/Teletext decoding circuitry (102 and 104) for detecting and extracting the page of embedded Videotext/Teletext data which contains TV program schedule listings having program information (title, scheduled program start and stop times, etc,...) pertaining to the TV programming being outputted from said studio;
- 3) Circuitry (106 and 107) which uses the currently extracted VPS code to identify the TV programming currently being outputted by the studio and which, in response thereto, obtains the program information from the program schedule listing pages that pertains to the identified TV program; and
- 4) Circuitry (@107 and 108) for generating a new/additional program related Videotext/Teletext page which contains the obtained program information that pertains to the TV program currently being broadcasted, whereby this added/generated Videotext/Teletext page can be decoded at subsequent receiving station locations and used to provide the viewer with

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<sup>37</sup> The examiner takes Official Notice that each **VPS** coding was notoriously well known in the art. Specifically, each **VPS** code was a 16 bytes digital Videotext-type signal which functioned as a unique TV program label. During the broadcast of every TV program, the broadcaster acted to embed/insert a corresponding unique **VPS** programming label/code into a given unused horizontal scan line (i.e. line 16) within the VBI of every video frame of the respective TV program.

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an overlay which includes the information that pertains to the program that is currently being viewed;

C) Embedding circuitry (@ 108 and 109) for embedding the new/additional program related Videotext/Teletext page into the TV signal which was outputted by the studio prior to transmission as a combined information transmission via illustrated antenna. .

As is illustrated in figure 2, Oberlies disclosed a TV receiving station which: 1) receives the combined information transmission transmitted from the transmitter system of figure 1; 2) extract the added program related Videotext/Teletext page therefrom; 3) locally generates a corresponding TELETEXT image from the extracted page; and 4) superimposes the locally generated Teletext image over the received/displayed TV programming whereby the superimposed image adds program related captioning pertaining to displayed TV programming (e.g. the title of the displayed programming, the scheduled start and end times of the displayed TV programming, etc,...).

## II. Oberlies as applied against claim 2:

1) The studio (101) in figure 1 of Oberlies corresponds to the "remote transmitter station" of claim 2; e.g. wherein the examiner maintains that the studio (101) was clearly, i.e. or at least *obviously*<sup>38</sup>, situated at a location that was "remote" from elements (102-109) of figure 1.

2) The embedded VPS coding that is provided by the studio (101) in figure 1 of Oberlies corresponds to the recited "instruct-to-embed signal" of claim 2 in that it at least instructs/causes elements (102-109) in figure 1 of Oberlies to generate and embed specific new/additional program related Teletext pages into the TV information transmission that is being transmitted by the Oberlies figure 1 transmitter system.

3) The new/additional program related Teletext pages that are generated and embedded into the information transmission in Oberlies each comprise a page of Videotext/Teletext data/control information that changes according to changes in the detected/extracted VPS codes. Specifically, when a first VPS code indicates that a first scheduled TV program is currently being outputted by the studio (101),

---

<sup>38</sup> Clearly elements 102-109 represent "add-on" circuitry that was to be added to the existing studio to transmitter transmission paths of conventional TV transmitting systems; i.e. otherwise the Videotext/Teletext provider itself could have provided the newly generated program related pages "directly" as part of its normal service.

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said first VPS code causes a first program related Videotext/Teletext page (i.e. comprised of first Teletext data/control information) to be generated and embedded into the information transmission. Thereafter, when the a second subsequent VPS code indicates that the next scheduled TV program is now being outputted by the studio (101), the second VPS code causes the embedding of said first program related Videotext/Teletext page to cease while causing the generating and embedding of a second program related Videotext/Teletext page (e.g. comprised of second Teletext data/control information) to occur in its place. Thus, the Teletext page data of Oberlies' first and second program related Videotext/Teletext pages correspond, respectively, to the recited "at least one of first data and first control signal" and to the recited "at least one of second data and second control signal" of claim 2.

**2) Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Oberlies [DE3,527,939] for the same reason that was set forth for claim 2 above. The following is noted:**

The studio (101) in figure 1 of Oberlies corresponds to the recited "origination transmitter station" of claim 3. With respect to this issue, the examiner notes that it was impossible for the "studio" in Oberlies to have simply generated the entire composite TV signal which was outputted from said studio (101) in a single all inclusive step of generation; e.g. the composite TV signal complete which was complete with embedded Videotext/Teletext services and embedded VPS coding. Obviously, if not inherently, the studio (101) of Oberlies at least:

- 1) received the TV programming that was to be outputted;
- 2) generated the Videotext/Teletext pages and VPS coding that was to be outputted; and
- 4) embedded the generated Videotext/Teletext pages and VPS coding into the TV programming in order to create/generate the composite TV signal which was actually outputted by the "studio" of Oberlies <sup>39</sup>.

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<sup>39</sup> Note the showings conventional TV network configurations that have been collected in Appendix A of this Office action.

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**3) Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Oberlies [DE3,527,939] for the same reason that was set forth for claim 3 above. The following is noted:**

With respect to the recitations of claim 4:

- 1) The “information” recitation of line 10. The examiner maintains that it fairly reads on the TV signal that is outputted from the originating studio (101) in figure 1 of Oberlies;
- 2) The “instruct signal” recitation of line 11 is broad and undefined. The examiner maintains that it fairly reads on either the vertical or the horizontal sync signal of the TV programming provided from the “studio” in figure 1 of Oberlies; i.e. being that both of these sync signals had to have been used by said “studio” in order to generated and embedded/inserted said VPS coding within the VBI period of the TV programing at the required horizontal line times/locations <sup>40</sup>;
- 3) The “transmitter control signal” of line 22 is broad and undefined. The examiner maintains that it fairly reads on that signal portion in the VBI of the TV programming (i.e. a given vacant horizontal line period) into which the VPS coding was inserted being that this signal portion was responsible for carrying/communicating the embedded VPS codes throughout the entire TV network [i.e. thereby at least meeting the limitations set forth in part (a) under section (2) of claim 4].

**4) Claims 5-11 and 13-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oberlies [DE3,527,939] for the same reason that was set forth for claim 4 above.**

---

<sup>40</sup> e.g. NOTE: figure 3 of Hutt et al. [US #3,961,137]; figure 37 in the article “A System of Data Transmission in the Field Blanking Period of the Television Signal” by PR Hutt; etc, ...

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**SECTION V:** (OTHER ISSUES)

1) The examiner notes that the art of record has been applied to the claims to the extent of the examiner's understanding in view of the extensive section 112 problems which have been noted above.

2) Any inquiry concerning this communication should be directed to **David E. Harvey** whose telephone number is **(703) 305-4365**. The examiner can normally be reached Monday-Friday between the hours of 9:30 AM and 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Andrew Faile, can be reached at (703) 305-4380.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to:**

(703) 872-9314

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA. Sixth Floor (Receptionist).

Any inquiry of general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose number is (703) 306-0377.

DEH 5/02

  
DAVID E. HARVEY  
PRIMARY EXAMINER

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## APPENDIX A: (CONVENTIONAL TV NETWORK CONFIGURATIONS)

# ELECTRONIC DELIVERY of DATA and SOFTWARE

The Cavendish Conference Centre  
London, 16-17 September 1986

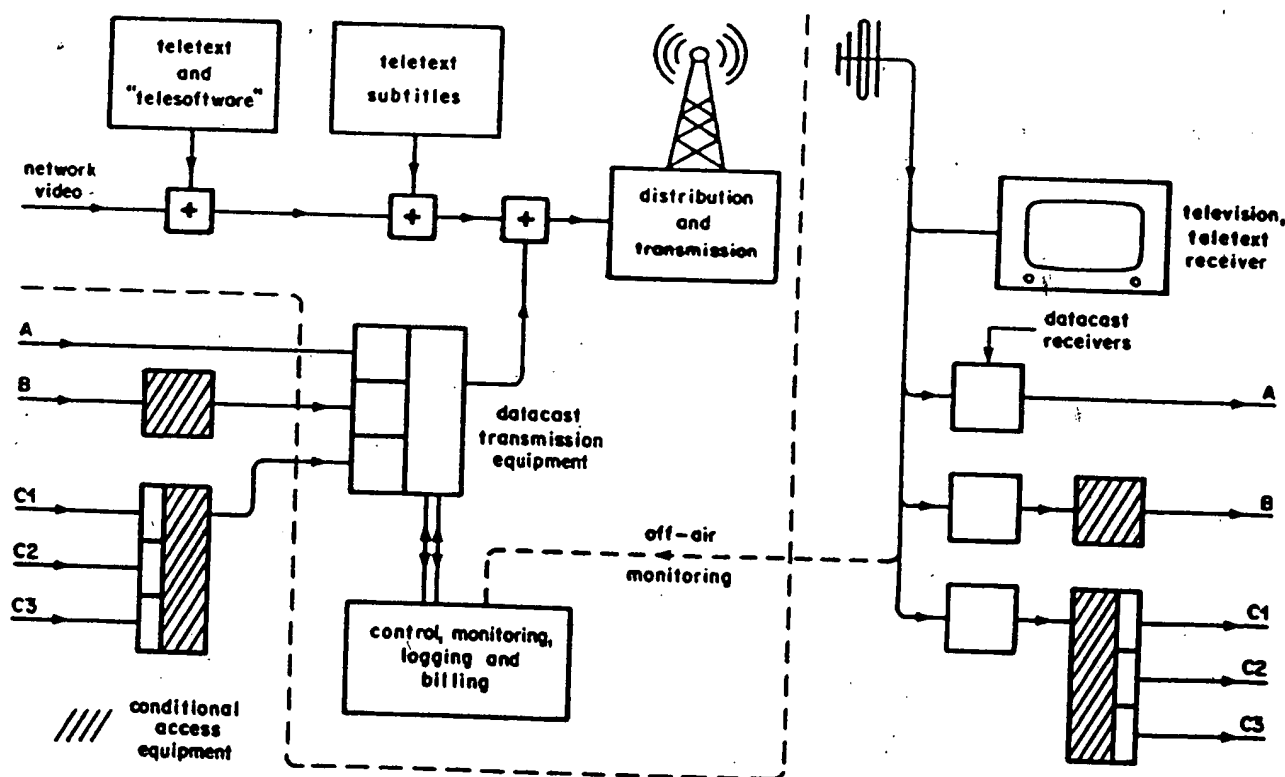


Fig. 5 Typical Datacast broadcasting system

DIN: S7374 0335 Q

358/  
147

Classification

Int CI<sup>2</sup>

H04N 7/08

A-2

USPO:

358-146

Title: The television as a receive only terminal

Authors: D McArthur

Source Publication: Systems International  
vol.5, no. 2, p. 38-39, March 1977

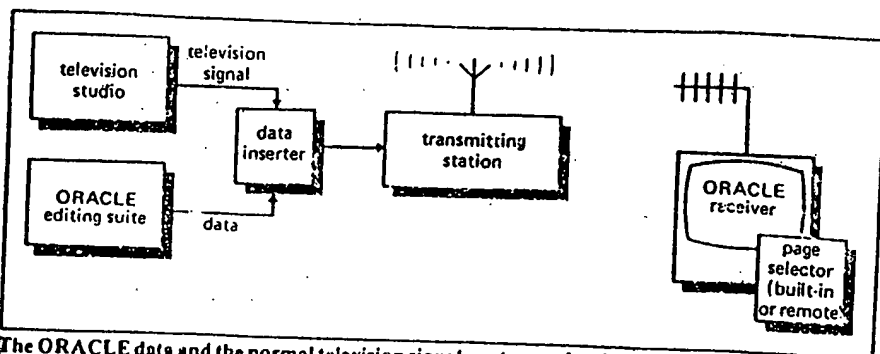
Publisher: Gershire Ltd  
Interface Media Division  
103 Kent Road  
Dartford, Kent  
ENGLAND

Acknowledgement

Reprinted by permission: the publisher

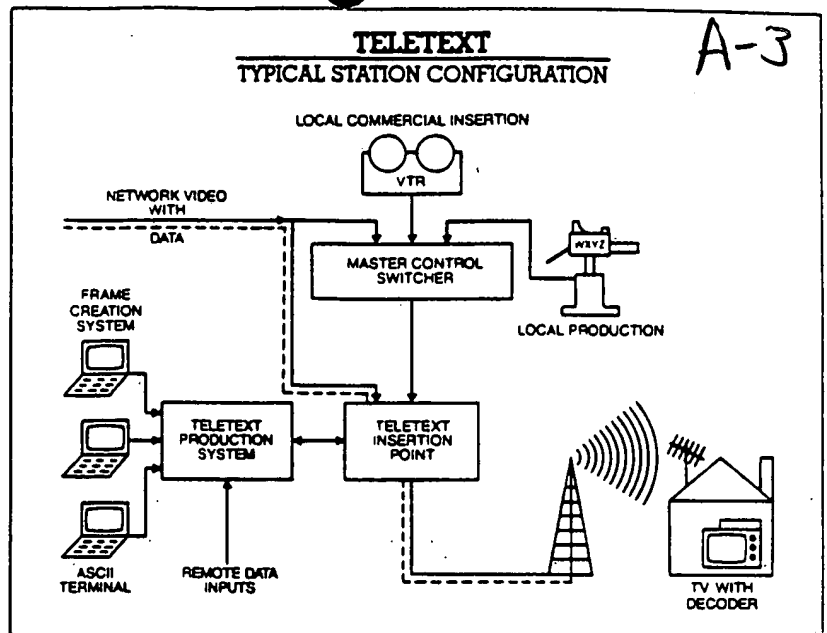
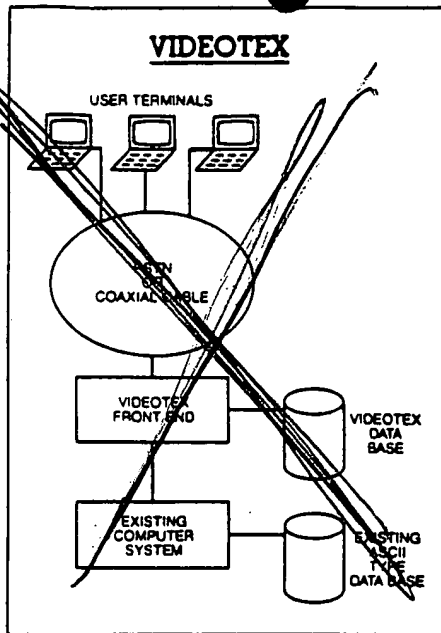
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39



The ORACLE data and the normal television signal are transmitted together





## VSA'S TELETEXT PRODUCTS

**VSA offers a range of teletext systems.** For the broadcaster or cablecaster who wishes to originate a teletext service or complement a network broadcast magazine, VSA offers a cost-effective system capable of handling a limited number of frame creation terminals. This system may be upgraded to handle additional terminals, and numerous functions such as: automatic insertion and deletion of time-dependent pages, scheduling of advertisements and automatic acquisition of wire copy. These automated features allow the station to get the most out of its teletext service while keeping the personnel required at a minimum. For networks, VSA can provide systems which also manage multiple magazines with many different insertion and transmission locations.

**VSA supplies individual products as well as systems.** Professional, high-quality receiver decoders, frame creation terminals, and equipment for extraction and insertion (diffusers, multiplexer inserters, databridges) of teletext data are available. VSA's diffuser, multiplexer inserter, and databridge may be purchased as separate pieces or as one integrated unit. The diffuser organizes teletext pages into magazine format for broadcast and sends them to the multiplexer inserter, which inserts the teletext data into the video signal. The databridge is used primarily to insert network-generated teletext into local programming.

## VSA'S VIDEOTEX PRODUCTS

**VSA's family of videotex products is designed for efficient, user-friendly information retrieval, transaction processing, and electronic mail.** Our videotex systems may be integrated with existing databases and computer centers. VSA's products are created for maximum flexibility and power, while remaining cost-effective and efficient.

**VSA offers three videotex architectures for different but complementary tasks.** The first consists of a stand-alone videotex processor for organizations who wish to start a videotex application and who are not dependent on existing ASCII databases. A second architecture is the addition of a videotex front-end processor to an existing in-house host computer. This provides a videotex database and relieves the mainframe of the communications work load, freeing it for other tasks. A third type, the network videotex processor, is designed for organizations wishing to exploit videotex advantages in a networked environment. This type of system optimizes data communication costs in a network architecture.

**Databases are designed for users unfamiliar with computers.** Videotex databases may be accessed through a series of menus or through a key-word. Simple command keys, such as *next*, *previous*, *enter*, and *erase*, are used in responding to prompts and menu requests. Users who are familiar with the database can bypass the menus and go directly to the information desired by using key words. Research and development are ongoing.

# TELETEXT SIGNAL GENERATION EQUIPMENT AND SYSTEMS

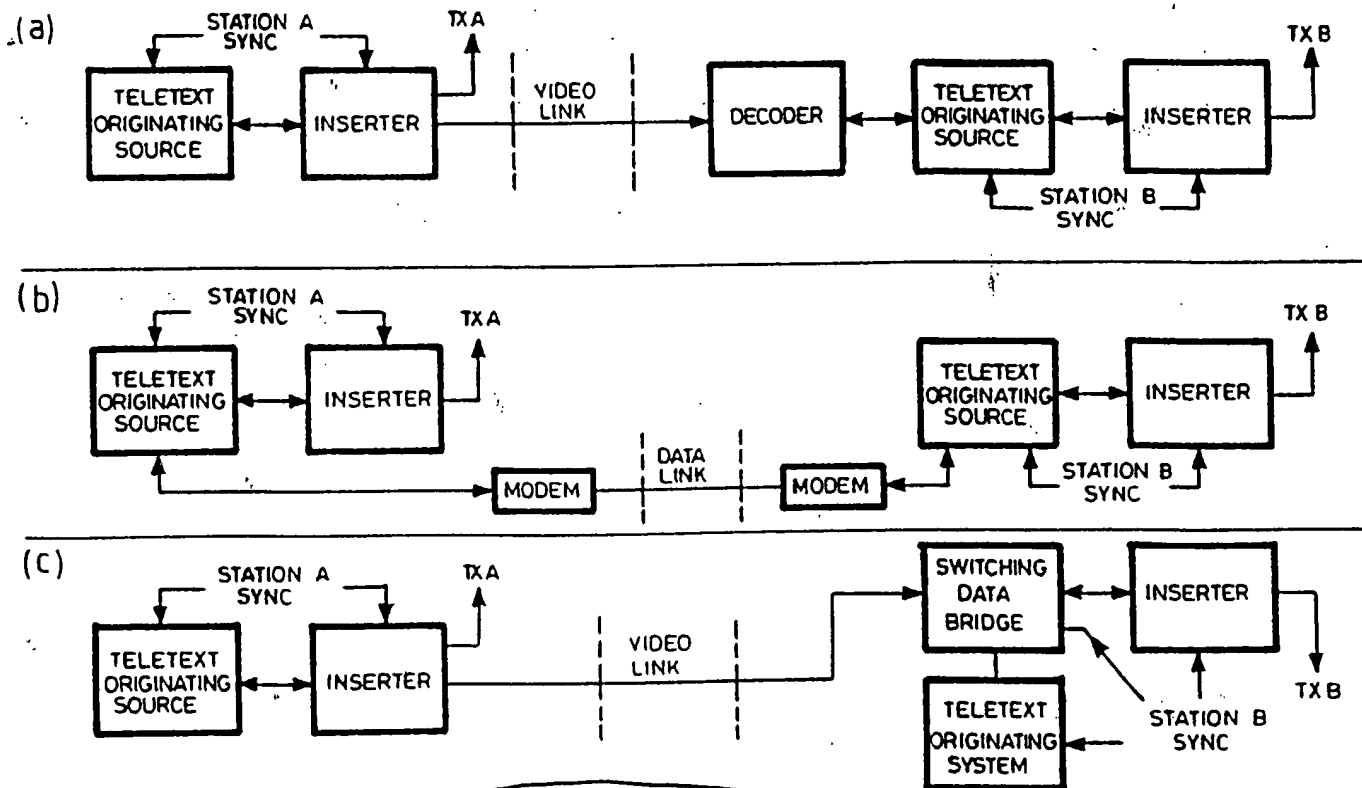
A-4

Peter L. Mothersole ✓

VG Electronics, Ltd.

Menzies Road, Hastings, Sussex TN34 1YQ, U.K.

use a switching data bridge, so that



LINKING TELETEXT SYSTEMS

Fig. 4.

RECEIVED JUNE 20, 1979.

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